

# **Jaycar** *Electronics*

**2018 ENGINEERING AND SCIENTIFIC CATALOGUE**

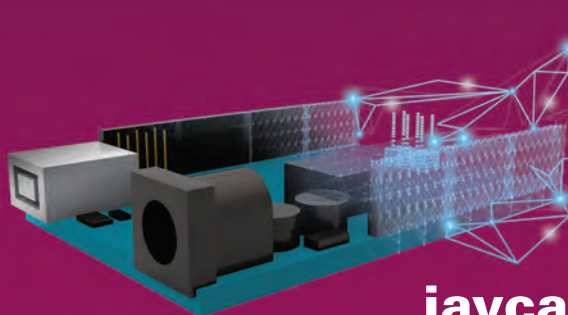
**7300+ Products**

**570+ New Products**

**548 Pages**



## **Connecting**



**[jaycar.com.au](http://jaycar.com.au)**

**\$4.95**



# A Letter To Our Customers:

It never ceases to amaze me that, when I get around to writing my annual catalogue letter, I have plenty of subjects to talk about. This year I want to reflect on the ever changing nature of the Internet.

Firstly, I think most of us would agree that the Internet, probably in the history of western civilization, has to take its place as the most influential phenomenon in the modern developed world. Especially when you consider that it has really only been ubiquitous since, say, the mid '90's. When I say "modern developed world", we have to understand that 3 billion people still know very little about the Internet. Indeed, half the world's population has no Internet access at all.

Even so, the Internet in our world is evolving technically very, very fast.

In parallel with the emergence of the Internet has been the equally impressive growth of mobile wireless data and telephone technology. So pervasive has been the emergence of mobile wireless data, coupled with high performance so-called "Smartphones", the terrestrial rollout of the Internet has been bypassed by mobile phones in many ways.

Indeed, wireless technology is proceeding at such a rapid pace that the Internet will probably continue to morph into a wireless-based system. Consider that great Australian invention Wi-Fi. This technology is continuing to find applications for itself, mainly due to its reliability, sturdiness and low cost. Other technologies will follow including LoRa and continued development of GSM. We have a word for wireless interconnectedness, The Internet of Things. In order for the unconnected world to have the Internet, in all likelihood they will go direct to wireless connectivity.

Once again, we here at Jaycar are following world trends closely and once again you will find examples of the latest developments in wireless technology, data transmission and management and many other things.

Before going into this, I would like to take the opportunity to welcome a brand-new hobby electronics magazine DIYODE. This is the first new hobby electronics magazine conventionally published in over 20 years anywhere in the world that we know of. It is a testimony to the health of the electronic enthusiast market in Australia and New Zealand that it has happened HERE. DIYODE magazine is available in all Jaycar stores along with the venerable Silicon Chip magazine. We are blessed with local availability of two world-leading publications.

Last year we announced the introduction of some branded product, namely Panasonic®, (cordless phones), SWANN® video surveillance equipment, and GME® communications gear. All of these products have been very popular and we are proud to announce that a new line, UNIDEN® is now part of our range. UNIDEN® is a well-known manufacturer of communications equipment and you will find these products the next time you visit a Jaycar store. Of course, they are all shown in detail inside your new 2018 catalogue.

We are also delighted to announce the introduction to our range, of the popular Raspberry Pi® alongside our vast range of Arduino® microcontrollers and related products. Even though Arduino® and Raspberry Pi® are very similar, they each have unique features which attract their own fans. Now you can choose either! In keeping with emerging wireless technology, we have a vast range of RF-enabled associated products.

Perhaps more than any single thing has been the developments in schools regarding the teaching of hands-on technology under the broad heading of STEM – Science, Technology, Engineering and Mathematics. In this year's catalogue you will see more emphasis on Arduino® and Raspberry Pi® products and related items that can be workshopped in a disciplined, learning environment.

Whilst there is nothing stopping any of these products being adapted for the home constructor, we also have a new range of smart modules called, collectively, Neuron. These modules simply click together (solderless) and are simply programmed (see page 76-79.)

On the 'hard wired' front, we have a fantastic new selection of exciting products. These include – ultra-fast home networking products, Wi-Fi battery cameras and smart home products, high powered USB chargers, UHF radios, high capacity battery banks, HDMI accessories with HDR and 4K CCTV systems. Especially new 3D printers.

Apart from new products and product directions, we have combined to expand our "bricks and mortar" network. In the past 12 months we have opened nine new stores across ANZ, check the back page of the catalogue or our website store finder. And of course where we do not have a Jaycar store we probably have a stockist. You will find a list of them on the inside rear covers of this catalogue.

Another exciting development in our company is the full roll out of our "Click & Collect" service across all company stores. You can now place your order online and collect it at a store convenient to you in just 2 hours.

Finally, I cannot close this letter to you without mentioning our fantastically successful "Nerd Perks" Rewards programme. We now have over 250,000 active members who regularly see the benefit in being part of this scheme. If you have not joined its easy see p 6 for more info or ask in any Jaycar store. Remember – its FREE to join!

So, in closing welcome to this year's edition of the Jaycar catalogue. It's the best yet. (It was even mentioned in a Sydney newspaper recently with no introduction, as it is, apparently assumed to be so well-known.)

We still love you and we love what we do and love serving you.

We look forward to being of further service to you in 2018.

Best wishes,














Gary Johnston  
Managing Director



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# Ordering From Jaycar Electronics:

## Visit Your Local Jaycar Store

With over 100 stores in Australia and New Zealand our network of retail stores continues to grow. Come and visit us at one of these locations - see our website or the back cover for full address, phone and trading hours details. Our friendly, experienced staff look forward to showing you our extensive range of products.



## Call Our Toll Free Hotline: 1800 022 888

Our experienced Techstore staff are waiting to take your order. Techstore operates Monday to Friday 8.30am to 5.30pm and Saturday 8.30am to 5.00pm (AEST).

## Post Your Order

Enclose your completed order form (on page 525) and send to:

Jaycar Electronics  
PO Box 7172  
Silverwater DC NSW 1811 Australia



**Click and Collect is now available at selected stores! Simply place your order online and the team at your local store will get the order together for you, ready to collect in just 2 hours!**

## Order Online [www.jaycar.com.au](http://www.jaycar.com.au)

Place orders from the convenience of your home on our secure website 24 hours a day, 7 days a week.

## Fax Your Order: (02) 8832 3118

Complete your order form (on page 525) and fax it any time.

## Kit Back Catalogue

[www.jaycar.com.au/kitbackcatalogue](http://www.jaycar.com.au/kitbackcatalogue) or see page 64.

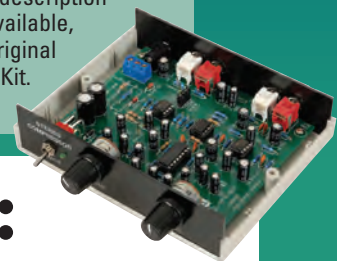
## Talk To The Techstore

In a case where you are unable to get to your local Jaycar store, we provide you with the Jaycar Techstore. Phone or email your order to us at any time, or alternatively you may speak to one of our professional shop trained staff members who will be able to assist you.

**FREECALL ORDER LINE: 1800 022 888** **ORDER VIA EMAIL:**  
Monday to Friday 8.30am to 5.30pm [techstore@jaycar.com.au](mailto:techstore@jaycar.com.au)  
Saturday 8.30am to 5.00pm (AEST)



We maintain in our central distribution warehouse an extensive range of discontinued Electronic Project Kits. Place your order online for the Kit Back Catalogue kits. On our website each of these kits has a full description and, where available, a link to the original article on the Kit.



# A Guide To Our Catalogue:



This is a brand new product for the Jaycar 2018 Catalogue. We're excited to bring it into our ranges!



This product includes some components that you have to build or assemble yourself.



These icons indicate the Warranty of a product, or if located on the top right hand corner of a page, the Warranty for all the products on that page. Warranty only covers faults in manufacture, unless stated otherwise.



A video providing more information is available on our website and our YouTube channel.



Learn more with our vast range of books. Look out for this book icon or see our index on page 527.



Products with this icon are not stocked in all stores but are easily special ordered in Store or online.



More information, specs, drivers, or manuals for this product are available on our website.



We've permanently dropped the price on this product - we're passing on those savings to you.

### COMPATABILITY ICONS:

To assist you in selecting compatible products for your preferred microcontroller, we have created two icons. They should help you select appropriate modules and hardware. If in doubt, ask our friendly team.



Raspberry Pi Compatible



Arduino® Compatible

# Search, Browse & Buy Anytime, Anywhere.



Everything you could need in one convenient place - a convenient resource for all things Jaycar and related.

- Product information
- Videos
- Datasheets
- Store locations
- Monthly advertising
- Online exclusive specials & deals
- Promotions

Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)

## Shop Online

It is simple, reliable and saves tonnes of time. With our website, you can find all the information you need, including special deals, before purchase.

## Store Finder

Even the most die-hard brick and mortar shop loyalist will appreciate how simple it is to locate your nearest Jaycar store. We have over 300 company owned stores and authorised stockists across Australia and New Zealand. Simply enter your postcode or area to find the closest one to you.

## Find Your Products

Our website is always live with the most complete, accurate and up to date information. Searching is a breeze with a powerful keywords engine; similar and relevant items can be compared side by side for you to always find the most suitable product for your needs.

## Flyers & Catalogue

Jaycar issues 20 flyers full of new products, specials, deals and rewards bonuses each year. You can grab it at your local store, or maybe from your mailbox, but you can also download a digital copy so you don't miss out on great offers.

## Multimedia Resources

Find out more about products and technologies not only in text, specifications and data manuals, but also in high resolution pictures and demonstrative videos.

## New Products, Specials, & Clearance

Watch this space closely as we constantly update it with new products, latest promotions and clearance sales. You will also see special events and important announcements on the pages, such as sporting stars visiting your local stores!



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[instagram.com/jaycar\\_electronics](https://instagram.com/jaycar_electronics)



[twitter.com/jaycarau](https://twitter.com/jaycarau)



[youtube.com/user/JaycarVideo](https://youtube.com/user/JaycarVideo)

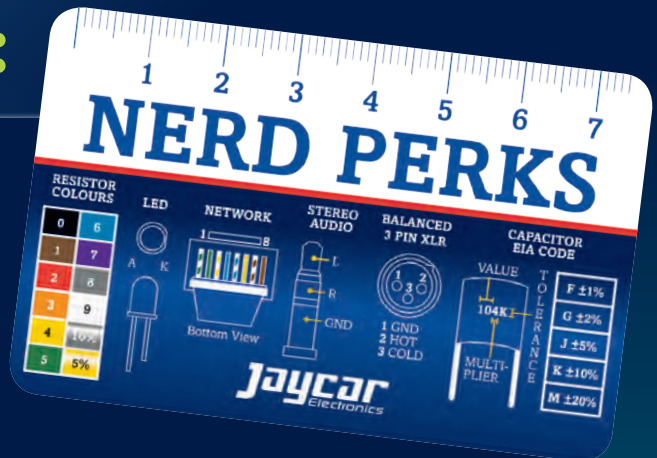


# Choose Your Card:

## Nerd Perks:

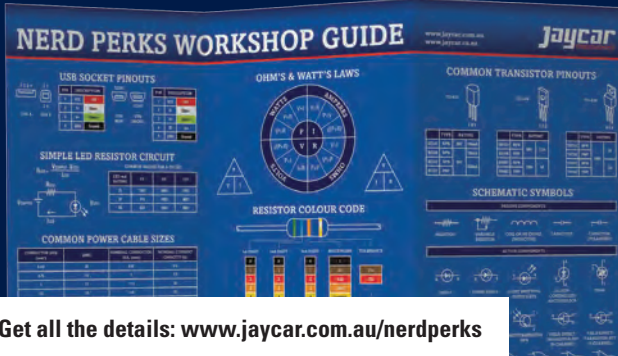
Join the club.. Enjoy the perks!

- Sign up in store or online.
- Monthly members only promotional deals (in-store and online).
- Accrue points with EVERY purchase.
- Check your point balance in-store or online.



Free workshop guide with registration!

Get a \$25 Jaycoins Rewards Card for every 500 points!



Get all the details: [www.jaycar.com.au/nerdperks](http://www.jaycar.com.au/nerdperks)

**Jaycar**  
Electronics  
GIFT CARD



## Gift Card:

Can't decide what to buy for that "hard to buy for" person?  
Give them a gift card!

Available in whole dollar values between \$20 and \$500.

Three year expiration from date of purchase\*.

Gift cards issued by Jaycar Electronics stores or via the website are redeemable at any Jaycar Electronics company owned store or mail order call centre in the country of purchase.

Cards can be partially or fully redeemed for the purchase of goods, any balance not redeemed will remain on the card until the date of expiry.

[www.jaycar.com.au/giftcards](http://www.jaycar.com.au/giftcards)

\*Applies to gift cards purchased after 1st March 2018

**Jaycar**  
Electronics  
**TRADE CARD**

[www.jaycar.com.au](http://www.jaycar.com.au)

[www.jaycar.co.nz](http://www.jaycar.co.nz)

## Trade Card:

For professionals engaged in electronics & construction-related industries

- Electrician
- Repair & Installations
- Fit-out Technician
- IT Purchasing & Management

Save between 5-40% off retail for most items. Use in-store or via the Techstore. Accounts available for frequent purchasers. Requires valid ABN or equivalent.

\*Not available for transactions outside Australia and New Zealand. They are valid at Jaycar company owned stores ONLY. Products on special excluded.

[www.jaycar.com.au/tradecard](http://www.jaycar.com.au/tradecard)

We asked you to show us what hardware around your home or office you have made smarter, or better connected.

# We were impressed!

We offered 4 x \$1,000 Jaycoins cards, but we were so blown away with your passion and enthusiasm, we couldn't hold it there. As a result, we have chosen 10 x \$1,000 Jaycoins winners!!!

## That's \$10,000!

The winners are spread throughout this catalogue, so go and check them out!



**WINNER**

Look out for the winners!

We couldn't fit them all in the catalogue, there is hundreds of them!  
Head to: [www.jaycar.com.au/connected2018](http://www.jaycar.com.au/connected2018) to check out more great entries.

You'll also notice there's loads of new educational products this year. The younger generations are keen to learn and love technology. We also decided to award two Junior prizes to the two entries below, with a \$250 Jaycoins card each, to further drive them to learn and explore with new technology!



### Smart Hardware Competition:

- ROSEMARY CARRERAS,  
SHOPS AT JAYCAR SYDNEY CITY

"My 9 year old son Christian loves electronics" ...  
"He invented an environmentally friendly robot named called Trash X360- a bin that comes to you."...



### Smart Hardware Competition:

- BAILEY WILLIAMS, SHOPS AT JAYCAR DUNEDIN  
"(Age 12) Hi Im Bailey and I am working on a tractor that I am converting from a static 1:32 scale. I am using Some arduino Nanos from Jaycar and lipo batterys and charger. The Low Loader you see behind the tractor Is a finished project. "...

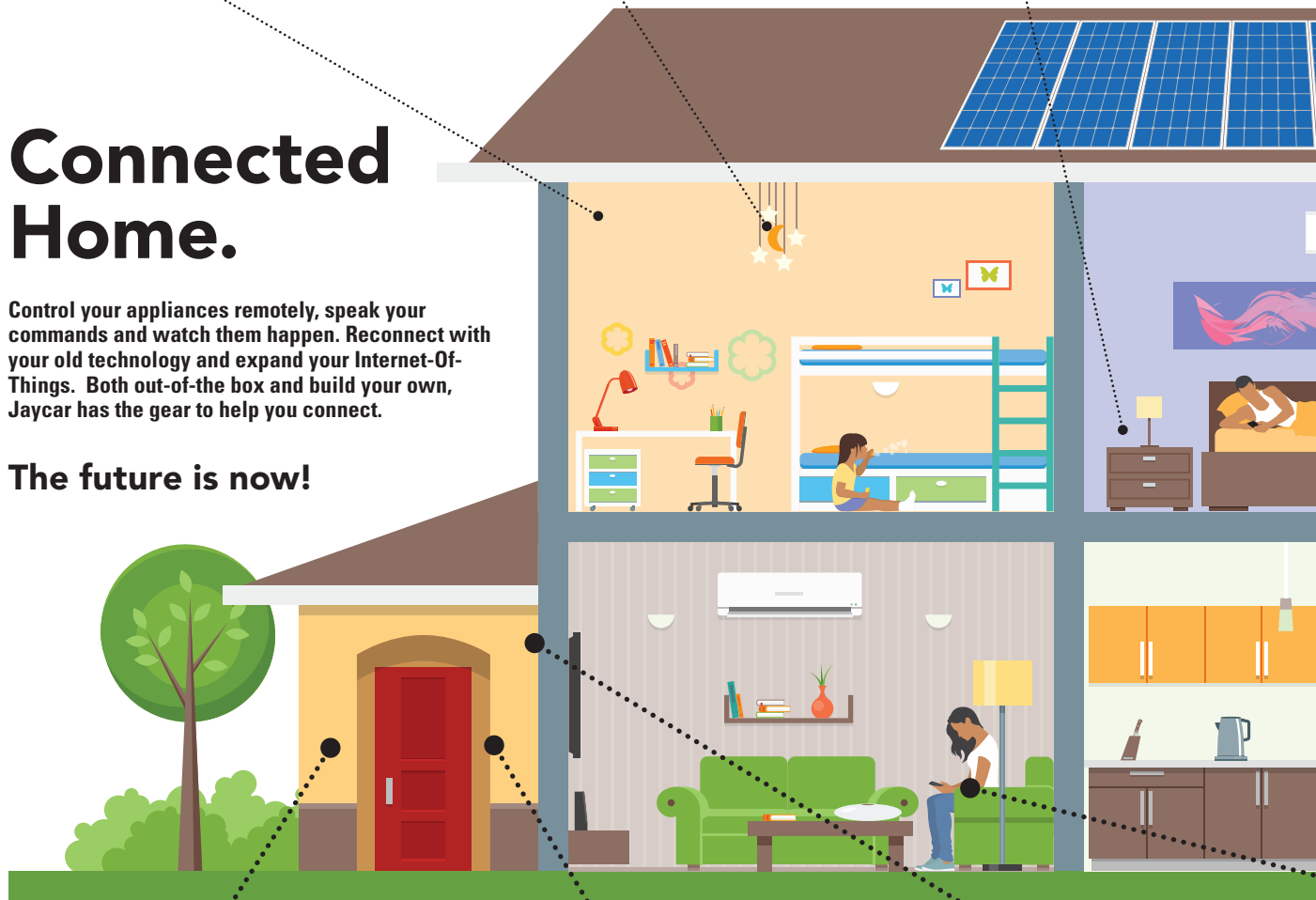




# Connected Home.

Control your appliances remotely, speak your commands and watch them happen. Reconnect with your old technology and expand your Internet-Of-Things. Both out-of-the box and build your own, Jaycar has the gear to help you connect.

The future is now!





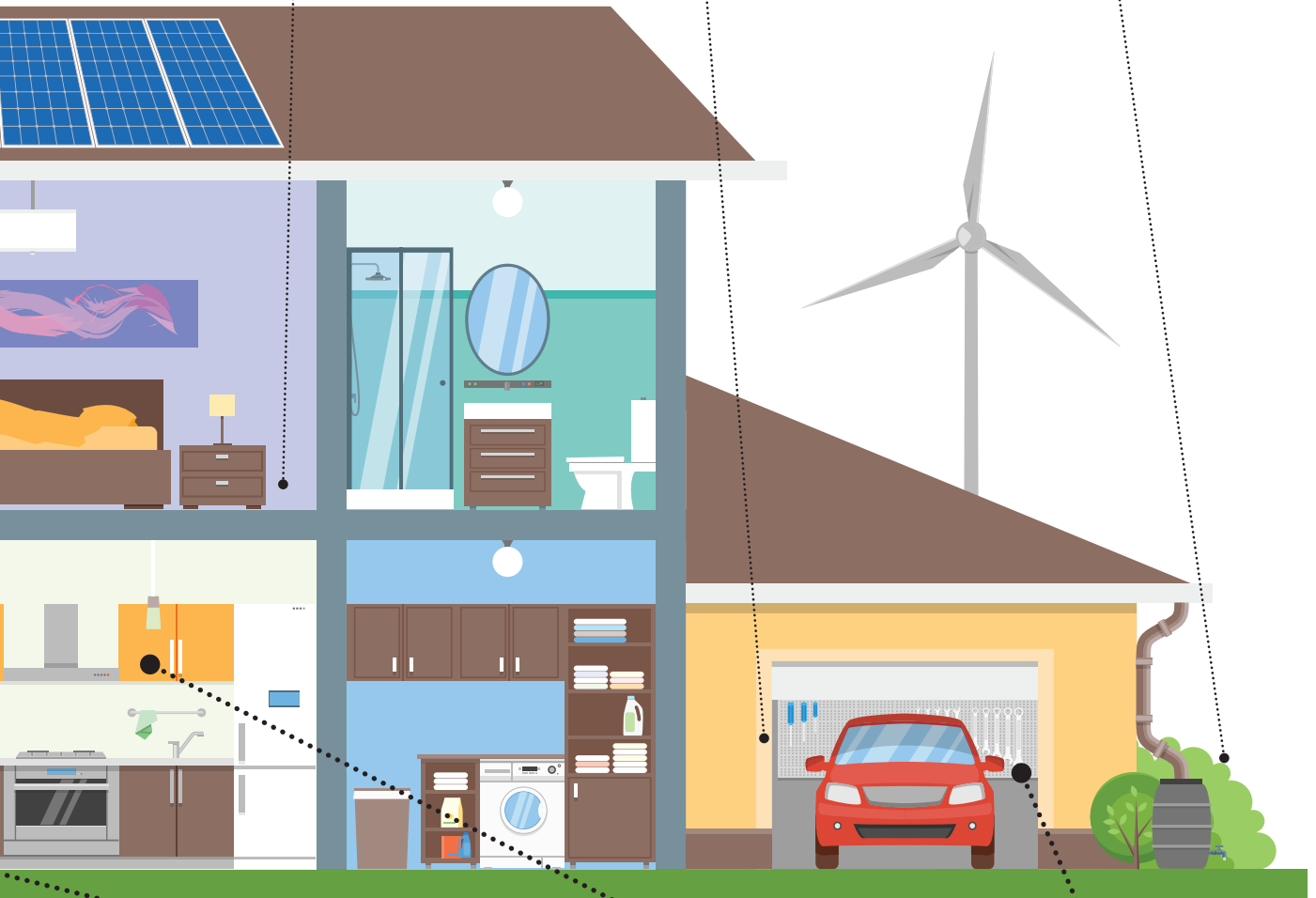
**WI-FI  
SMART PLUG**  
PAGE 365



**DIY ARDUINO  
RFID KEYPAD**  
PAGE 58



**WI-FI WEATHER  
STATION**  
PAGE 512



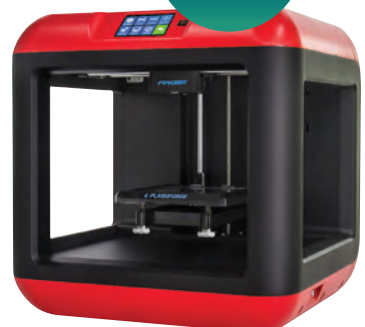
**WI-FI SMART  
REMOTE**  
PAGE 469



**WI-FI  
WHOLE-HOME  
SYSTEM**  
PAGE 306



**WI-FI  
3D PRINTER**  
PAGE 67





# NEW 2018

## New Products:

We have added many great new products this year. Here's some of them!

### 2.8 INCH TOUCHSCREEN FOR RASPBERRY PI

XC-9022, PAGE 17



### USB POWERED 8W SOLDERING IRON

TS-1532,  
PAGE 214



### 600A TRUE RMS AC CLAMP METER

QM-1630,  
PAGE 250



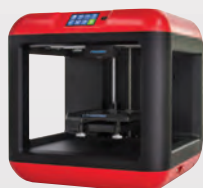
### ESP32 MAIN BOARD WITH WIFI AND BLUETOOTH

XC-3800, PAGE 20



### 3D PRINTER

TL-4220, PAGE 167



### MAKEBLOCK CODEY ROCKY ROBOT KIT

KR-9230, PAGE 80



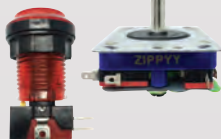
### MAKEBLOCK NEURON INVENTOR KIT

KJ-9190, PAGE 76



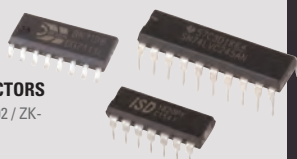
### DIY ARCADE PARTS

SM-1052 / SP-0662,  
PAGE 28



### SEMICONDUCTORS

ZK-8884 / ZZ-8202 / ZK-8829, PAGE 98



### 720P WI-FI IP CAMERA WITH INFRARED LEDS

QC-3849, PAGE 277



### SWANN 1080P BATTERY POWERED WI-FI CAMERA

QV-9060, PAGE 266



### 1080P WI-FI DASH CAMERA WITH GPS

QV-3865, PAGE 296



### SWANN 8 CHANNEL 4K DVR KIT WITH 4 X 4K PIR BULLET CAMERAS

QV-9051, PAGE 271



### 720P OUTDOOR TRAIL CAMERA

QC-8041, PAGE 283



### WI-FI RFID ACCESS KEYPAD

LA-5358, PAGE 287



### GPS 3.5" HEAD-UP DISPLAY

LA-9032, PAGE 302



### 2.4GHZ DIGITAL WIRELESS 4.3" REVERSING CAMERA

QM-3840, PAGE 297



### TP-LINK DECO AC1300 MESH

YN-8444, PAGE 306



### ASUS AV2 ETHERNET OVER POWER WI-FI KIT

YN-8434,  
PAGE 307



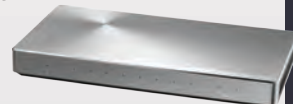
### ASUS USB-AC68 DUAL BAND AC1900 USB WI-FI ADAPTOR

YN-8436, PAGE 308



### ASUS 10 PORT ETHERNET SWITCH WITH 2 X 10GBPS PORTS

YN-8430,  
PAGE 309



### MINI WIRELESS KEYBOARD WITH TOUCHPAD MOUSE

XC-4951, PAGE 318



### UNIDEN DECT CORDLESS TELEPHONE

YT-9036, PAGE 327



### 5W UHF HANDHELD TRANSCEIVER

DC-1068, PAGE 335

### GME UHF TRANSCEIVER XRS-330CP PORTABLE PACK

DC-9056, PAGE 337



**TPLINK SMART  
WI-FI PLUG**  
YN-8446, PAGE 365



**SMART WI-FI LED BULB  
WITH COLOUR CHANGE**  
YN-8448, PAGE 420



**65W HIGH  
CAPACITY 4 PORT  
USB CHARGING  
STATION**  
MP-3418, PAGE 342



**PORTABLE  
POWER CENTRE**  
MB-3748, PAGE 350



**MAINS POWER METER WITH  
EXTENDABLE LCD DISPLAY**  
MS-6108, PAGE 365



**0.3 TO 30V, 0 TO 3.75A  
PORTABLE LABORATORY  
POWER SUPPLY**  
MP-3844, PAGE 360



**UNIVERSAL FAST  
CHARGER WITH LCD &  
USB OUTLET**  
MB-3555, PAGE 374



**DUAL INPUT 20A DC/DC  
MULTI-STAGE  
BATTERY CHARGER**  
MB-3683, PAGE 392



**200A DC POWER METER  
WITH ANDERSON  
CONNECTORS**  
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**12V 1.5W SOLAR  
TRICKLE CHARGER**  
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**HDMI POWERLINE  
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**HDMI TO VGA  
CONVERTER  
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**SMART WI-FI  
SPEAKER BLACK  
WITH GOOGLE  
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**UNIVERSAL HDMI  
TO SMARTPHONE  
USB CABLE**  
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**4 CHANNEL HDR  
HDMI SWITCHER  
WITH REMOTE  
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AC-1780, PAGE 463



**240WRMS STEREO  
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AA-0520, PAGE 452



**WI-FI UNIVERSAL  
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**USB STREAMING  
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**MOSQUITO  
ZAPPER WITH  
180 LUMEN LED  
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**MULTI-FUNCTION  
LCD WALL CLOCK**  
XC-0225, PAGE 515



**WIRELESS LASER  
PRESENTER WITH  
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XC-5409, PAGE 516



**2.4GHZ  
WI-FI FPV  
QUADCOPTER**  
GT-4194,  
PAGE 521



**TWISTER REMOTE  
CONTROL STUNT  
CAR**  
GT-4206, PAGE 522



**12V DUAL 4" FANS  
WITH CLAMP**  
GH-1403, PAGE 504



**PORTABLE 7.5L  
12V COOLER/  
WARMER**  
GH-1366,  
PAGE 505



**MINI 5GHZ 1080P  
HDMI WIRELESS  
AV SENDER**  
AR-1909, PAGE 516





# Best Sellers:

Some of the most popular items from our huge range.



**TOUCH SCREEN  
WIRELESS WEATHER  
STATION WITH USB  
PC LINK**  
XC-0348, PAGE 511

**80CH UHF CB  
TRANSCEIVER**  
DC-1074,  
PAGE 335



**WIRELESS 5.8GHZ  
AV SENDER/RECEIVER**  
AR-1913, PAGE 460



**PORTASOL SUPER PRO GAS  
SOLDERING TOOL KIT**  
TS-1328, PAGE 212

**HDMI TO VGA STEREO  
AUDIO CONVERTER**  
AC-1724, PAGE 466



**4 STAGE 6/12V  
4A BATTERY  
CHARGER  
WITH LCD**  
MB-3611, PAGE 391



**4 CH 720P AHD DVR KIT  
WITH 4 X 720P CAMERAS**  
QV-3135, PAGE 269

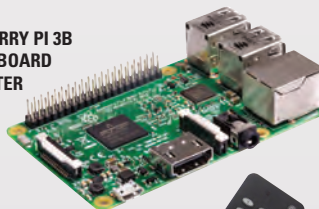


**3 INPUT HDMI  
SWITCHER**  
AC-1705,  
PAGE 463



**12V 400A JUMP  
STARTER &  
POWERBANK**  
MB-3753, PAGE 394

**RASPBERRY PI 3B  
SINGLE BOARD  
COMPUTER**  
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**TOTAL CONTROL  
TV REMOTE**  
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**BLUETOOTH HANDSFREE  
TRANSMITTER WITH  
USB CHARGER**  
AR-3133, PAGE 495

**ARDUINO  
COMPATIBLE  
DUINOTECH  
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**ECONOMY HDMI  
1.4 CABLE - 1.5M**  
VV-7915, PAGE 461



**150W CAN INVERTER**  
MI-5127, PAGE 398



**AC1200 WI-FI  
EXTENDER**  
YN-8372, PAGE 305



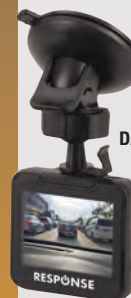
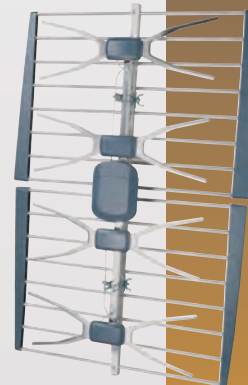
**CAT III  
MULTIMETER  
WITH TEMPERATURE**  
QM-1323, PAGE 244

**8 ZONE WIRELESS  
ALARM KIT**  
LA-5284, PAGE 289



**12V PORTABLE STOVE**  
YS-2811, PAGE 505

**HEAVY DUTY UHF PHASED  
ARRAY TV ANTENNA**  
LT-3154, PAGE 478



**1080P CAR  
DASH CAMERA**  
QV-3845,  
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**120W FOLDING  
SOLAR PANEL  
& CHARGE  
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## The Next Generation

We have all been warned that children in our future face bleak career choices; Hamburger fryers, tour guides, park rangers, etc. etc. It does not have to be this way.

As much as all jobs have a nobility in themselves, there are many young people who are very intelligent, creative and talented in understanding the technical world. There are other options for them.

In itself, there are many people enjoying creative lives in the world of IT. But there is a far, far bigger world than just IT.

IT just cannot describe the world of the future, this world of cars that drive themselves, etc.

This world is going to be run by people who not only have IT skills but they have an intrinsic knowledge of the exploding world of wireless communication, electronic hardware technology and the heady combination of all of these emerging technologies.

Fortunately, for those who have the talent, there are fantastic new products that are coming on line to stimulate young minds onto launching themselves into this arena. They are going to have careers that were started earlier in life from a technical hobby or interest.

We here at Jaycar are very, very excited about this emerging world. That's why we have placed this range of products at the very front of our new catalogue.

Whether you are young or old, or just interested in technology you really should have a look at the products - basically products to showcase the emerging technologies by stimulating people to construct projects, learn and be stimulated to go on and have careers based on what they have learned. Over 90 pages!

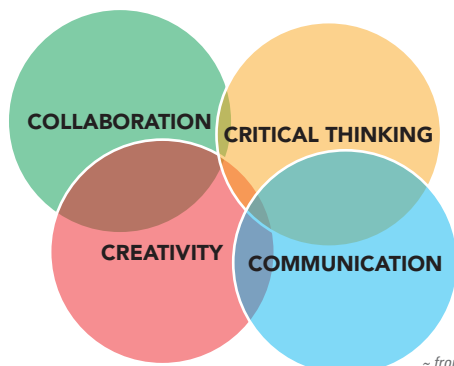
The Government are finally helping too. The future school curriculum is going to be influenced and have more and more by these emerging technologies. The name (an acronym of course) called STEM. More on this below.

### WHAT IS STEM?

STEM, or Science, Technology, Engineering and Mathematics is a curriculum based on the idea of educating students in these four specific disciplines using an interdisciplinary and applied approach. Each has a critical role to play but also enables discovery and progress in other fields.

### THE STUDENT EXPERIENCE

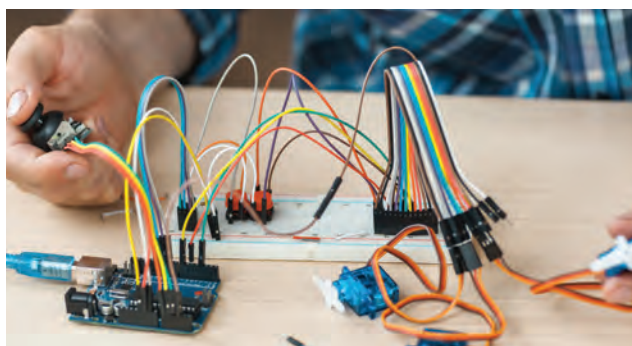
Through participation in STEM opportunities, youth learn skills like:



~ from [www.starportal.edu.au](http://www.starportal.edu.au)

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### THE FUTURE OF STEM CAREERS

Capabilities in STEM offer exciting career opportunities into the future. Experts predict computerisation and technology are likely to change the nature of 44% of Australian jobs over the next 20 years. While some jobs will become less common, other interesting and new jobs will be created. Jobs will increasingly be characterised by non-routine thinking and high levels of originality and creativity. To realise our potential Australia needs to have a workforce that is technologically savvy and able to innovate. One of the best ways to do this is by improving capabilities in STEM through innovative learning throughout the education system school through university. ~ from [www.starportal.edu.au](http://www.starportal.edu.au)



## Raspberry Pi & Accessories:

Raspberry Pi is the cute name for a British developed range of small computer boards and peripheral hardware. Don't be fooled! These little boards have very powerful computing power thanks to the latest microprocessor technology. They are light years ahead of the 8-bit hobby computers of the past. They are full 64-bit machines with similar processing power to office computers of your laptop.

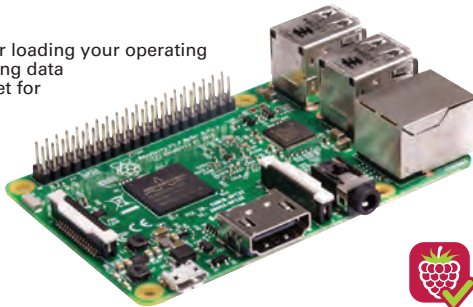
The Raspberry Pi is, in fact, a learning system. It starts, of course, with a Starter Pack, to launch you into the world of computer HARDWARE. (You learn software along the way.)

Hopefully, your imagination will be hooked on the possibilities these little

### RASPBERRY PI 3B SINGLE BOARD COMPUTER

The Raspberry Pi 3B is a single board computer about the size of a credit card. It can run Raspbian or Ubuntu Linux, Windows 10 IoT core or even a dedicated media centre OS. Use it to start learning about Linux or IoT. The bank of GPIO pins allows you to interact with the real world using Scratch or Python. It's even possible to connect an Arduino® board to the Raspberry Pi 3B, or even connect Arduino® modules to the GPIO pins (module must be 3.3V compatible). You could use our huge range of duinotech modules to turn your Raspberry Pi 3B into a connected sensor hub.

- Quad Core 1.2GHz Broadcom BCM2837 64bit CPU
- 1GB RAM
- BCM43438 wireless LAN and Bluetooth® Low Energy (BLE) on board
- 40-pin extended GPIO
- 4 USB 2 ports
- 4 Pole stereo output and composite video port
- Full size HDMI
- CSI camera port
- DSI display port
- Micro SD port for loading your operating system and storing data
- Micro USB Socket for 5V/2A power
- Dimensions: 85(L) x 56(W) x 17(H)mm

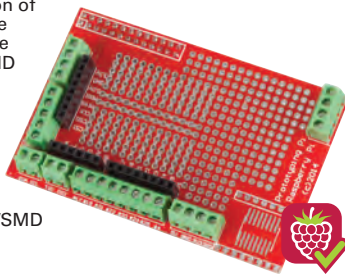


	CAT.	Qty 1+
Raspberry Pi 3B	XC-9000	\$74.95

### PROTOTYPING HAT FOR RASPBERRY PI

This prototyping hat for Raspberry Pi has a main area with gold plated holes that are spaced at the standard 2.54mm, making this ideal for use with DIP packaged ICs or sensors. Around the side of the board are 0.1" header strips and screw down terminals that tap into the GPIO, power and other interfaces for temporary (but robust) connection of components or wiring that can be easily removed. It also has a large prototyping area for PTH and SMD components.

- Screw Terminals
- Header connections
- Gold plated holes
- 2.54mm spacing of holes
- 26 pin GPIO
- SOIC Breakout
- Large prototyping area for PTH/SMD components
- Dimensions: 85(W) x 56(L)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Prototyping Hat for Raspberry Pi	XC-9040	\$15.95	\$13.95	\$12.45

### COMPATABILITY ICONS:

To assist you in selecting compatible products for your preferred microcontroller, we have created two icons. They should help you select appropriate modules and hardware. If in doubt, ask our friendly team.

Arduino® Compatible



Raspberry Pi Compatible



computers have in their relationship to the real world.

Oh, and be stimulated by the enthusiasts who have trodden this path already with their ingenious applications of computer technology. See their stories thru this catalogue.

The following pages describe all the hardware extension products for Raspberry Pi.

Also look at the other option, Arduino (p18). They are similar but different – a bit like the Apple® PC & the IBM® PC. Like that choice you can't go wrong if you choose on or the other.

### RASPBERRY PI STARTER KIT

The Raspberry Pi has been designed as a computer that anyone can use. If you want to get started with a Raspberry Pi, but don't know where to start, then this kit has just about everything you need. Ideal for those starting out, or even as a basic educational computer for a student. You will also need a USB keyboard, mouse, HDMI monitor/TV and HDMI cable.

#### Includes:

- Raspberry Pi 3B
- Acrylic Case
- Power Supply and USB Cable
- Book (Programming the Raspberry Pi: Getting Started with Python)
- Micro SD Card loaded with NOOBS software
- Getting Started Guide



	CAT.	Qty 1+	Qty 3+	Qty 6+
Raspberry Pi Starter Kit	XC-9010	\$149.00	\$133.95	\$118.95

### 16GB NOOBS SD CARD FOR RASPBERRY PI

A 16GB Micro SD card with fullsize SD card adapter preloaded with the NOOBS software, allowing easy install of the standard Raspbian operating system. Great option for beginners who aren't comfortable imaging their own cards. Also includes Librelec media player as an install option.

The following operating systems are also able to be downloaded and installed by NOOBS (internet connection needed):

- Raspbian Lite
- Lakka
- OSMC
- Screenly
- Windows 10 IoT Core



	CAT.	Qty 1+
16GB NOOBS SD Card for RPi	XC-9030	\$24.95

### RASPBERRY PI MEDIA PLAYER KIT

A great use for the Raspberry Pi computer is as a compact media player. This kit includes everything you need to turn your HDMI/TV into a customizable media centre. Because it's based around the Pi, there are heaps of custom apps that can be added to make your media centre do what you like.

#### Includes:

- Raspberry Pi 3B
- ABS Case
- HDMI Cable
- Power Supply and USB Cable
- Miniature Wireless Keyboard/Trackpad with Media functions
- MicroSD card installed with Media software



	CAT.	Qty 1+	Qty 3+	Qty 6+
Raspberry Pi Media Player Kit	XC-9012	\$169.00	\$151.95	\$134.95

## RASPBERRY PI & ACCESSORIES (CONTINUED)

### 5MP CAMERA FOR RASPBERRY PI

This 5MP camera connects directly to the camera connector on the Raspberry Pi, saving precious USB ports. The camera is capable of up to 2592x1944 resolution. Video recording is supported for 1080p @ 30fps, 720p @ 60fps and 640x480p @ 60/90fps. Support for the camera is built into the latest version of Raspbian.

- Based on the 5MP Omnivision 5647 camera module
- Connects directly to Raspberry Pi/camera connector
- Up to 1080p video
- Up to 2592x1944 pixel images
- Fully compatible with both the Model A and Model B Raspberry Pi



SPECIFICATIONS	XC-9020
Still resolution	5 Megapixels - 2592 x 1944 Pixels
Video	Supports 1080p @ 30fps, 720p @ 60fps and 640x480p 60/90
Recording Video	S15-pin MIPI Camera Serial Interface - Plugs Directly into the Raspberry Pi Board
Dimensions	25(W) x 20(L) x 9(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
5MP Camera for Raspberry Pi	XC-9020	\$24.95	\$22.45	\$19.95

### GPIO EXPANSION KIT FOR RASPBERRY PI

If you want to delve into the prototyping of hardware for the Raspberry Pi, then the GPIO expansion kit is a necessity. Using a colour coded rainbow ribbon cable, all 40 GPIO pins are broken out to a header which can be plugged straight into a breadboard. The header is clearly labelled with each pin name, making breadboarding of circuits super easy.



	CAT.	Qty 1+	Qty 3+	Qty 6+
GPIO Expansion Kit for RPi	XC-9042	\$12.95	\$11.45	\$9.95

### RTC CLOCK MODULE FOR RASPBERRY PI

The XC-9044 is a tiny RTC module which uses I<sup>2</sup>C to communicate with the Raspberry Pi. Once set up, it can be used to provide a battery backed clock source, and is ideal for situations where the Pi may be powered off and on or out of range of Wi-Fi where it cannot get a reliable time fix.

- Five Pin header that plugs straight onto the Pi's GPIO pins I<sup>2</sup>C interfaceBased on highly accurate DS3231 IC

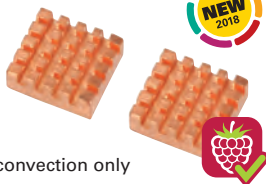


	CAT.	Qty 1+	Qty 4+	Qty 10+
RTC Clock Module for Raspberry Pi	XC-9044	\$9.95	\$8.95	\$7.95

### COPPER HEATSINK FOR RASPBERRY PI PK. 2

If you've got your Raspberry Pi doing some intensive work like running a media player or mining cryptocurrency, then heatsinks can help to dissipate some of that extraneous heat that is generated. Can even be used on motor driver ICs or other power ICs and regulators.

- Self-adhesive pads for peel and stick use
- PGA works well for all airflow including convection only



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HH-8584	\$7.95	\$7.15	\$6.35

### STACKABLE HEADER FOR RASPBERRY PI

One of the essentials for building your own custom hat for Raspberry Pi. Perfect fit for the 40 pin GPIO header. Can also be used to break out a DIL connection to a breadboard by bending the pins slightly.

- 2 x 20 stackable header
- Extended body for extra spacing



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HM-3228	\$3.95	\$3.55	\$3.15

### OFFICIAL RASPBERRY PI 3B CASE RED AND WHITE

This is the official case for Raspberry Pi 3B designed by the Raspberry Pi Foundation. The snap-together case requires no tools and has numerous removable panels to allow access to GPIO pins and other internal connections such as the camera port. Deep slot for easy access to Micro SD card.

- Stylish red and white design
- Easy no-tools assembly
- Protect your Pi
- Light pipes for activity LEDs
- Four Rubber feet included



	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-9006	\$14.95	\$13.45	\$11.95

### ENCLOSURE FOR RASPBERRY PI

If you're using your Raspberry Pi as a computer, you probably don't want all the pins and wires exposed to short out. This compact case is the perfect thing for protecting your Pi in fact it wouldn't even look out of place sitting next to your TV if you are using the Pi as a media computer. It has openings for the USB, HDMI, Ethernet, 3.5mm, MicroUSB and MicroSD card ports on the Pi, and includes four screws to secure the case closed. The removable end panel features cooling holes, and overall, the case is only millimetres longer than the Pi itself. If you do want to tinker with your Pi, the top can be removed to allow access to the GPIOs and other headers. For easier access to the GPIO pins and other headers, see XC-9004

Includes:

- Base
- Lid
- End Panel with vent holes
- Fixing screws



	CAT.	Qty 1+	Qty 4+	Qty 10+
Enclosure for Raspberry Pi	XC-9002	\$9.95	\$8.95	\$7.95

### CLEAR ACRYLIC ENCLOSURE FOR RASPBERRY PI WITH GPIO ACCESS

This simple snap-together enclosure is the perfect way to protect your Raspberry Pi, but still be able to easily access the GPIO pins and other headers. The crystal clear acrylic doesn't hide anything, and if you are going to be connecting and disconnecting things, then this enclosure will keep your Pi from shorting out, while still allowing access via the hinged lid. For semi-permanent setups, there are slots in the lid for the GPIOs, Camera header and Display header. Another hole directly above the processor provides ventilation and allows mounting a small cooling fan.

Includes:

- Six plates with cutouts for all Raspberry Pi connections
- Mounting nuts and bolts
- Insulating spacers



	CAT.	Qty 1+	Qty 4+	Qty 10
Clear Acrylic Enclosure for RPi3	XC-9004	\$9.95	\$8.95	\$7.95

### 5V POE POWER SPLITTER

This device splits the PoE into a regular ethernet plug and microB USB power plug. Giving you 5VDC to power your devices like Raspberry Pi or Arduino®.



SPECIFICATIONS	YN-8416
PoE Voltage Input	44-57V
Voltage Output	5VDC @ 2.4A Max
Connectors	1 x RJ45 PoE Socket 1 x RJ45 Ethernet Plug 1 x MicroB USB Plug
PoE Standard	IEEE 802.3af
Data Rate	10/100Mbps
Dimensions	88(L) x 30(W) x 26(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
5V Micro USB Plug NEW	YN-8416	\$29.95	\$26.95	\$23.95



## Touch Screens for Raspberry Pi:

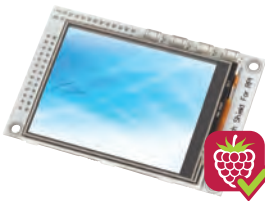
Touch screens are a great way to provide an intuitive user interface, and with the Raspberry Pi this is as easy as connecting any one of the touch screens from our range offering 2.8", 5" and 7" screens. The 2.8" and

5" Touch screens utilize Resistive Touch technology, with a pen option offering single touch operation. The 7" Touch screen utilizes advanced capacitive touch technology giving you the full multi-touch capabilities.

### 2.8 INCH TOUCHSCREEN FOR RASPBERRY PI

This compact 2.8 inch screen provides 320 x 240 resolution and includes resistive touch functionality. It creates a small but functional user interface capable of displaying and controlling a Raspbian desktop. Low power requirement, powered directly from the GPIO pins. Custom image/ kernel drivers required for operation.

- 2.8 inch
- 320x240 pixel
- Resistive touch
- Plugs straight into the top of Raspberry Pi



SPECIFICATIONS		XC-9022		
Screen		2.8", 320x240 Pixels, TFT		
Voltage		3.3-5V		
CAT.	Qty 1+	Qty 3+	Qty 6+	
2.8"	XC-9022	\$59.95	\$53.95	\$47.95

### NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store. \* Conditions apply.

### 5 INCH TOUCHSCREEN WITH HDMI AND USB

This 5 inch LCD screen has a resolution of 800x480. It can connect directly to a Raspberry Pi and can connect to any other HDMI source that outputs the native 800 x 480 resolution, via the built-in HDMI port. It also includes a resistive touch interface via the GPIO header. This module is designed to connect directly to the top of a Raspberry Pi, with a small HDMI double plug that locks the two together, but it can be used as a standalone display powered via the micro USB socket on the display. A backlight with switch is included. Now you can add a compact second display to your HDMI device, or make your own portable display device. Some display and driver configuration may be needed for operation.

- 5 inch with resistive touch
- 800x480 pixel
- HDMI
- Touch interface GPIO only

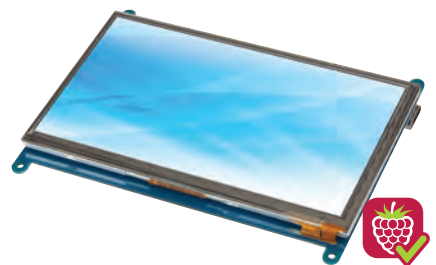


SPECIFICATIONS		XC-9024		
Screen		5", 800x480 Pixels		
Inputs		HDMI, Resistive Touch		
Supports		Raspbian for touch, video via HDMI at 800 x 480		
Weight		175g		
Dimensions		121(W) x 78(H)mm		
CAT.	Qty 1+	Qty 3+	Qty 6+	
5"	XC-9024	\$99.95	\$89.95	\$79.95

### 7 INCH TOUCHSCREEN WITH HDMI AND USB

This 7 inch LCD screen has a resolution of 1024x600. It can connect directly to a Raspberry Pi as well as to any other HDMI source that supports the native 1024 x 600 resolution, via the built-in HDMI port. It also includes a capacitive touch interface. This module is designed to connect directly to the top of a Raspberry Pi, with a small HDMI double plug that locks the two together, but it can be used as a standalone display powered via the micro USB socket on the device. A back-light with switch is included. Now you can add a compact second display to your HDMI device, or make your own portable display device. Turn the Pi plus monitor combination into your own portable computer, small enough to install in a car, or even a custom 3D printed case. Some display and driver configuration may be needed for operation. This display works with Microsoft Windows® versions up to Windows® 10, and supports 5 point touch input (with the exception of Windows® XP which has single point touch).

- 7 inch
- 1024x600 resolution
- Capacitive touch screen
- Switchable backlight
- HDMI input
- Powered via one of the 2 micro USB ports. The other ports is for touch support
- Mounting tabs in each corner



SPECIFICATIONS		XC-9026		
Screen		7", 1024x600 Pixels		
Inputs		HDMI, USB Capacitive Touch		
Supports		Raspbian, Ubuntu, Kodi, Windows 10 IoT or XP (one touch point), Windows 7, Windows 8 and Windows 10 (5 Point Touch)		
Touch		Five-Point Capacitive		
Weight		380g		
Dimensions		165(W) x 124(H)mm		
CAT.	Qty 1+	Qty 3+	Qty 6+	
7"	XC-9026	\$159.00	\$142.95	\$126.95

### Jaycar in the Community:

Jaycar has been a proud sponsor of the Starlight Children's Foundations for many years. The Starlight's mission is to "Brighten the lives of seriously ill children and their families." A very admirable mission which the Foundation fulfils daily both inside and outside the hospital setting. In 2018, Starlight's celebrates its 30th Anniversary. To the Starlight volunteers and those participating in the Starlight Express Rooms, Wish Granting, or Livewire Online programs, congratulations from all of us at Jaycar on the amazing milestone. We put our hand up to help support your further endeavours to fulfil your mission.



## RASPBERRY PI BOOKS

### RASPBERRY PI PROJECTS FOR EVIL GENIUS

Ten brand new, hands-on DIY projects for the Raspberry Pi! This fully illustrated guide shows how to create all kinds of entertaining and practical gadgets with the Raspberry Pi. Raspberry Pi Electronics Projects for the Evil Genius features ten fun DIY projects that showcase the Pi's applications in computing, communications, robotics, photography, and video. Each Evil Genius project includes a detailed list of materials, sources for parts, schematics, and clear, step-by-step assembly and programming instructions. Readers will get up and running right away by learning how to program a touchscreen, interface with an Arduino® processor, build a fully working cell phone and even build a super computer using a cluster of Pis! Advanced projects include a Software Defined Radio, robot controller, robotic arm, point-and-shoot camera, and a complete infrared surveillance system. Features C, Java, and Python programming techniques.



CAT.	Qty 1+
BM-7162	\$49.95

### PROGRAMMING THE RASPBERRY PI - BOOK

Don't be scared off by the name. Learning Python is a great way to getting to know the hardware on the Pi, and although this book is written for the Raspberry Pi 2, the hardware differences are small, and most of the book is perfectly suited to the Pi 3B. The book is a great introduction to Python, and if you are looking to do any amount of programming on the Raspberry Pi, then Python comes highly recommended, and there is excellent library support for the Pi's hardware. The book includes a comprehensive language guide, graphical interface creation, games, hardware interfacing and even a robot project.



CAT.	Qty 1+
BM-7160	\$29.95

## About Duinotech:

A microcontroller is a small, inexpensive computer. The most popular microcontroller amongst electronics enthusiasts, is the Arduino, or technically the ATMEGA328P. This single chip has everything required to operate like a small computer, it can be used to control your lights, measure temperature, control your garage door, and so on. All you need is a free program called Arduino® IDE and the Duinotech Learning Kit, and you will be developing your very own creation in no time. For the advanced enthusiast you will find hundreds of exciting modules and add-on shields for the Arduino® boards. Arduino is a similar product to Raspberry Pi (see p15). Either system will give you a fantastic intro to computer technology. If anything ARDUINO is supported worldwide by more suppliers. Your decision to choose one system will probably be down to what your tech friends or what your school is supporting.

duinotech

## Tech Talk: What Is Arduino®?

Arduino® is an open source hardware and software prototyping environment, but what does this mean? Open source means that the boards and programs have been developed by a community of people who are passionate about building their own ideas into projects, but also are willing to share their knowledge, designs, code and skills with other like-minded people. You not only have access to what's in this kit, but a wealth of shared resources, examples and project ideas to help you develop and learn. To learn more about Arduino® visit [www.Arduino.cc](http://www.Arduino.cc)

## Select Your Model: Arduino® Compatible Boards



	XC-4410	XC-4620	XC-4420	XC-4430	XC-4414
<b>Name</b>	duinotech Uno	duinotech Lilypad	duinotech Mega	duinotech Leonardo	duinotech Nano
<b>Controller</b>	ATMega 328P	ATMega 32u4	ATMega 2560	ATMega 32u4	ATMega 328P
<b>Program Memory</b>	32kB	32kB	256kB	32kB	32kB
<b>RAM</b>	2kB	2.5kB	8kB	2.5kB	2kB
<b>EEPROM</b>	1kB	1kB	4kB	1kB	1kB
<b>Digital IO</b>	14	5	54	20	14
<b>Analog IO</b>	6	4	16	6	6
<b>PWM Pins</b>	6	4	15	7	6
<b>USB Connector</b>	USB-B	USB-B Micro	USB-B	USB-B Micro	USB-B Mini
<b>Shield Compatible</b>	•		•	•	
<b>Dimensions (mm)</b>	75 x 53 x 13	51 x 50 x 7	108 x 53 x 15	73 x 53 x 13	46 x 18 x 18
<b>Page</b>	19	20	19	20	20

## Tech Talk: Arduino® Main Board Selection

### UNO (XC-4410):

If in doubt, choose the Uno board. The Uno offers the best shield compatibility, especially if you are working with a shield that uses SPI (serial peripheral interface) for communication. Most shields are designed with the Uno in mind, so if you're having trouble getting sample code working, making sure it works with an Uno is a good start.

### NANO (XC-4414):

The Nano is essentially an Uno in a smaller package. Obviously, it will not work with shields, but if you have a design you need to make smaller, or just want something compact to fit on a breadboard or prototyping board, then the Nano is a good choice. Because the Nano uses the same microcontroller IC as the Uno, practically any circuit designed around an Uno can be transferred to a Nano.

### LEONARDO (XC-4430):

The big difference between an Uno and a Leonardo is the microcontroller IC on the Leonardo has the USB functions built-in. While this saves an IC on the board, it also means the microcontroller can talk directly to a connected computer via USB. If you're building a circuit where you want to emulate a keyboard or mouse, or perform some other USB function, then the Leonardo will be a good choice. The inbuilt USB functionality also separates the USB-Serial from the Serial communication on D0/D1. We find this is handy when working with shields and modules that use serial communication, as debugging data can be kept separate from control signals on D0/D1.

### LILYPAD USB (XC-4620):

The Lilypad USB has the same microcontroller IC as the Leonardo, so is a good choice for similar applications, but is designed around a 3.3V board voltage, so should be considered if you are interfacing to

modules that are not 5V tolerant. The Lilypad USB also has an inbuilt Lithium battery charge circuit, so is ideal for projects that will need to connect to a battery. The smaller size also suits portable projects

### MEGA (XC-4420):

The main time you will need to step up to a Mega is if you run out of resources - whether it is pins, RAM, EEPROM or program flash memory, the Mega has more of it. Even if you need extra hardware serial ports or PWM capable pins, these are available on the Mega. Standard shields will still fit on the Mega, so you don't necessarily need to start from scratch if you're already designing for the Uno or Leonardo.

### ATMEGA328P IC (ZZ-8727):

This isn't quite a main board, but if a Nano isn't small enough, there's something even smaller. This is simply the bare microcontroller IC as found on the Uno board and its accompanying crystal oscillator. If you don't need a USB-Serial converter or a 5V regulator, then the ATMEGA328P IC is worth looking at. You can even test your design on a breadboard, and then transfer it to our new HP-9570 and HP-9572 prototyping boards to make your design more permanent. You may need to use the XC-4627 ISP programmer to upload your sketches due to the lack of a USB-Serial converter.

### I STILL CAN'T FIND ONE BOARD THAT DOES WHAT I NEED!

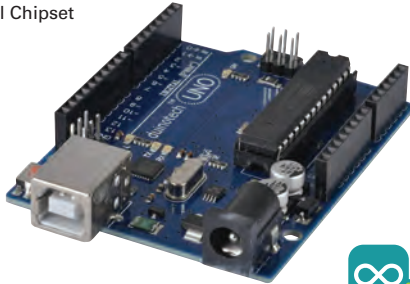
We don't hear this too often, but a possible solution is to use multiple main boards in your project. You might consider setting up one board to collect data from sensors or manage an output display, then connect back to the other main board over a single serial pin, freeing up resources.

## ✓ ARDUINO® COMPATIBLE BOARDS

### DUINOTECH CLASSIC (UNO R3)

The flagship of our duinotech family, the duinotech Classic is a 100% Arduino® Compatible development board. Its stackable design makes adding expansion shields a piece of cake. Powered from 7-12VDC or from your computer's USB port. In the past few years the Arduino® has taken the electronics world by storm. Everyone from hobbyists to professional engineers is making use of its limitless versatility. And it's not just for tech-heads; it's easy to learn programming has made the Arduino® a hit with artists and educators as well. Jaycar is proud to add the duinotech to our line-up. Providing every feature of the Arduino® UNO and the Freetronics-Eleven, now at an even lower price! Join the Arduino® revolution today!

- Fully Arduino® UNO Compatible
- ATmega16u2 USB-Serial Chipset



### duinotech

SPECIFICATIONS	XC-4410
<b>ATmega328P Microcontroller</b>	Program Memory: 32kB (2KB used by bootloader) EEPROM: 512 bytes, SRAM: 2kB Speed: 16MHz
<b>IO</b>	Digital IO: 14 pins (6 are configurable as Digital or PWM) PWM Capable: 6 pins, Analog Inputs: 6 pins Serial Ports: 1 (more supported via SoftwareSerial library)
<b>Input Voltage</b>	5VDC Regulated via USB port or 5V pin, 7-14VDC via Vin pin On-board regulator supplies 5V when unit is powered via Vin pin
<b>Dimensions</b>	75(W) x 53(L) x 13(H)mm

	CAT.	Qty 1+	Qty 5+
UNO	XC-4410	\$29.95	\$26.95

### DUINOTECH LEARNING KIT - PERFECT FOR BEGINNERS

Looking to get into Arduino® but don't quite know where to start? We have specially selected the components in this kit to allow an easy entry into the world of Arduino® and to work with the examples included with the Arduino® IDE. There are many resources online to teach how the Arduino® software and hardware interact. This kit is also compatible with the full range of Duinotech shields and modules, which can be used to extend your Arduino® experience.

#### Includes:

- 1 x Uno Main Board with USB Cable
- 1 x Breadboard
- 1 x Jumper Wires
- 1 x Servo Motor
- 1 x LDR Light Sensor Module
- 1 x RGB LED Module
- 1 x Joystick Module
- 1 x Buzzer Module
- 1 x LED Matrix Module
- 1 x Line Trace Module
- 1 x LED's
- 1 x Pushbuttons
- 1 x Resistors
- 1 x Carry case with insert tray and dividers

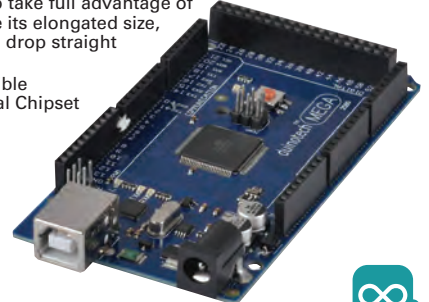


	CAT.	Qty 1+	Qty 3+	Qty 6+
Includes UNO Board	XC-3900	\$79.95	\$71.95	\$63.95

### DUINOTECH MEGA

This is our most powerful Arduino®-Compatible board. Boasting more IO pins, more memory, more PWM outputs, more Analog inputs and more Serial ports, the MEGA is definitely the Leader of the duinotech pack. When you have a project that just needs more inputs, outputs & memory than the duinotech Classic (Uno) can deliver, the MEGA has them in spades. And with 8x the program memory, you have the room to write much larger programs to take full advantage of the increased IO. Despite its elongated size, standard shields will still drop straight onto this board.

- Fully Arduino® Compatible
- ATmega16u2 USB-Serial Chipset



### duinotech

SPECIFICATIONS	XC-4420
<b>ATmega2560 Microcontroller</b>	Program Memory: 256kB (4kB used by bootloader) EEPROM: 4kB, SRAM 8kB, Speed: 16MHz
<b>IO</b>	Digital IO: 54 pins (15 are configurable as Digital or PWM) PWM Capable: 15 pins, Analog Inputs: 16pins Serial Ports: 4 (1 is connected to on-board USB-Serial port)
<b>Input Voltage</b>	5VDC Regulated via USB port or 5V pin, 7-14VDC via Vin pin On-board regulator supplies 5V when unit is powered via Vin pin
<b>Dimensions</b>	108(W) x 53(L) x 15(H)mm

	CAT.	Qty 1+	Qty 5+
MEGA	XC-4420	\$49.95	\$44.95

### DUINOTECH MEGA KIT

#### Includes:

- 1 x duinotech MEGA
- 1 x Solderless breadboard
- USB Cable
- 1 x 4 Digit Seven Segment Display
- 1 x 1 Digit Seven Segment Display
- 1 x 8x8 Dot Matrix Display
- 1 x 6AA battery holder
- Assorted Resistors
- Assorted LEDs
- RGB LED Module
- 4 x Tactile switches
- 2 x Piezo Sounders
- Assorted Jumpers
- 1 x 74HC595 Shift Register
- 1 x 50k Potentiometer
- 2 x Light Dependant Resistors
- 1 x Infrared Photo Diode
- 1 x Infrared Remote Receiver
- Analog Temperature Sensor
- 1 x 17 Button IR remote control
- 1 x Solderless breadboard
- 1 x 40-pin header
- 1 x Two channel relay module
- 1 x 2x16 LCD Display



### duinotech

	CAT.	Qty 1+	Qty 3+	Qty 6+
Includes Mega Board	XC-4286	\$109.00	\$97.95	\$86.95

There are a number of Arduino® Main Boards available, and as you might expect, different boards will work better in different situations. If you've already checked out our Comparison Guide and still are not sure about which board to choose, or even just want some guidance for an upcoming project, see our Selection Guide on previous page.

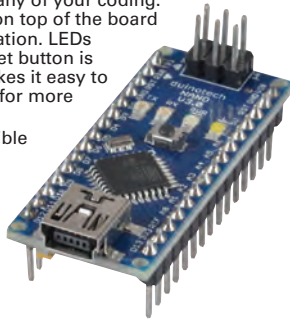


## ✓ ARDUINO® COMPATIBLE BOARDS

### DUINOTECH NANO

This is the most breadboard friendly Arduino®-Compatible device you will find. Despite its small size, it packs virtually all the features of the full Duinotech boards into a tiny DIP-style board that drops directly into your breadboard. It uses exactly the same ATmega328P chip as its larger cousins, so there is no need to change any of your coding. A Mini-B-USB port is easily accessible on top of the board for programming and serial communication. LEDs show power and serial status and a reset button is easily accessible. Its small DIP-style makes it easy to embed into Veroboard or custom PCBs for more advanced projects.

- Fully Arduino® and duinotech Compatible
- FT232RL USB-Serial Chipset
- USB cable included



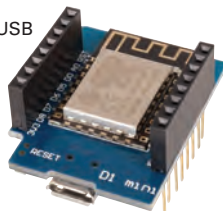
SPECIFICATIONS	XC-4414
<b>ATmega328P Microcontroller</b>	Program Memory: 32kB(2kB used by bootloader) EEPROM: 512 bytes, SRAM:2kB, Speed: 16MHz
<b>IO</b>	Digital IO: 14 pins (6 are configurable as Digital or PWM) PWM Capable: 6 pins, Analog Inputs: 6 pins Serial Ports: 1 (more supported via SoftwareSerial library)
<b>Input Voltage</b>	5VDC Regulated via USB port or 5V pin, 7-14VDC via Vin pin On-board regulator supplies 5V when unit is powered via Vin pin
<b>Dimensions</b>	46(L) x 18(W) x 18(H)mm

CAT.	Qty 1+	Qty 5+
XC-4414	\$29.95	\$26.95

### WIFI MINI ESP8266 MAIN BOARD

The ESP8266 based WiFi Mini board packs an 80MHz microcontroller with WiFi into a board not much bigger than a coin. With easy-to-add support for the Arduino® IDE, the WiFi Mini is the perfect compact solution to your IoT sensor node problem. Includes 4MB of flash memory for your program and 11 digital IO pins and one analog input pin to interface to the world.

- 3.3V operating and IO voltage
- 5V-3.3 converter onboard for operation from USB
- Arduino® Addon available
- XC-3850 Prototyping Shield available for adding extra hardware



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-3802	\$24.95	\$22.45	\$19.95



### Smart Hardware Competition:

- MICHAEL DIMOUDIS, SHOPS AT JAYCAR  
FERNTREE GULLY

"A Raspberry Pi IoT Home and Security Controller. I built a RPi app to drive relays and observe security sensors, and an iPhone app to control everything, from security to garden lights, garage door, beacon proximity, and more. All connected via Azure IoT Hub in the cloud."

### DUINOTECH LILYPAD BOARD

A compact ATmega 32UT based main board designed with portability in mind. Just like the Leonardo, a single chip handles main controller functions as well as USB connectivity, so the Lilypad can also act as a USB mouse or keyboard. Another big difference is that the Lilypad is a 3.3V board, and so all its inputs and outputs are limited to 3.3V, although it can run off 5V from the USB port.

- 9 Digital IO pins, 4 which can work as PWM and 4 which can work as analog inputs
- On-Off Switch
- LiPo Battery Charging connector and Circuitry



duinotech

SPECIFICATIONS	XC-4620
<b>Program Memory</b>	32kB
<b>SRAM</b>	2.5kB
<b>EEPROM</b>	1kB
<b>Processor Frequency</b>	8MHz
<b>Dimensions</b>	Dia.: 51m - Depth: 6mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Lilypad	XC-4620	\$14.95	\$13.45	\$11.95

### DUINOTECH LITE (LEONARDO)

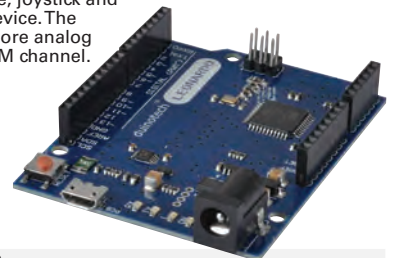
Most of the duinotech models use two chipsets, one for the main controller, one for USB communication. The duinotech Lite combines both these functions into a single IC. This opens the door for more advanced USB functions. Now you can have your duinotech Lite emulate a computer keyboard, mouse, joystick and many other types of input device. The duinotech Lite also boasts more analog inputs (12), and an extra PWM channel.

- Fully Arduino® Compatible
- Built in USB-Serial



duinotech

SPECIFICATIONS	XC-4430
<b>ATmega32u4 Microcontroller</b>	Program Memory: 32kB (4kB used by bootloader) EEPROM: 1kB, SRAM: 2.5kB Speed: 16MHz
<b>IO</b>	Digital IO: 20 pins (7 are configurable as digital or PWM) PWM Capable: 7 pins Analog Inputs: 12 pins (6 are shared with digital pins) Serial Ports: 2 (One USB, one UART, more supported via SoftwareSerial library)
<b>Input Voltage</b>	5VDC Regulated via USB port or 5V pin 7-14VDC via Vin pin On-board regulator supplies 5V when unit is powered via Vin pin
<b>Dimensions</b>	75(W) x 53(L) x 13(H)mm



	CAT.	Qty 1+	Qty 5+
Leonardo	XC-4430	\$29.95	\$26.95

### ESP32 MAIN BOARD WITH WIFI AND BLUETOOTH

The ESP32 is a powerful dual core microcontroller featuring WiFi and Bluetooth, and thanks to the efforts of the Arduino® community, is able to be programmed with the Arduino® IDE through the ESP32 addon. It has 512kB of RAM, 4MB of flash memory and heaps of IO pins with features like 12 bit ADC, 8 bit DAC, I²S, I²C, touch sensor and SPI. This is the next step up if a standard AVR based Arduino® isn't powerful enough to do what you need.

- 3.3V operating and IO voltage
- 5V-3.3 converter onboard for operation from USB
- Arduino® Addon available (installation required)
- Micropython firmware available



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-3800	\$39.95	\$35.95	\$31.95



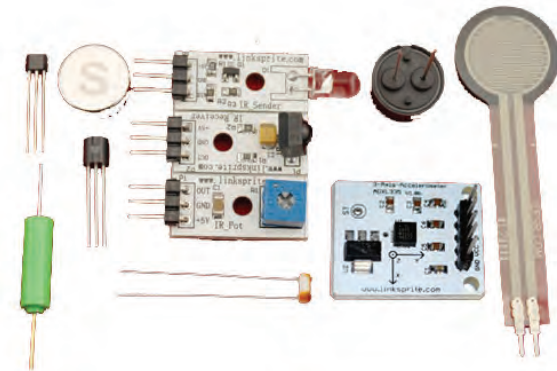
## VALUE PACKS

### 9 PIECE SENSOR PACK FOR ARDUINO®

This sensor pack for Arduino® includes the following components:

- 1 x IR Receiver Sensor
- 1 x Tilt Sensor
- 1 x Photo Cell Sensor
- 1 x Temperature Sensor
- 1 x Buzzer
- Hall Effect Sensor
- 1 x ADXL 335 Triple Axis Accelerometer
- 1 x Force Sensitive Resistor

duinotech



Not available in all stores but can be ordered

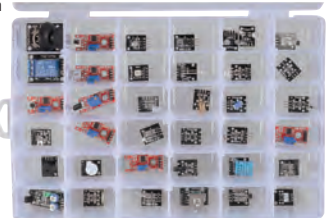
CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4593	\$64.95	\$57.95	\$51.95

### 37 PIECE DELUXE MODULES PACKAGE

With 37 different sensors and modules, this kit covers just about every input and output you can poke a soldering iron at. Packaged in a clear plastic organiser. See our website for detailed code samples.

- Joystick Module
- Relay Module
- Small Microphone Module
- Large Microphone Module
- Line Tracking Sensor
- Obstacle Avoidance Sensor
- Flame Sensor Module
- Hall Effect Sensor
- Touch Sensor
- Digital Temperature Sensor
- Buzzer Module
- Passive Buzzer/ Sounder
- RGB LED Module
- SMD RGB LED Module
- Two Colour LED Module
- Reed Switch Module
- Mini Reed Switch Module
- Heartbeat Sensor
- Seven Colour Flashing LED Module
- Laser Module
- Tactile Switch Module
- Shock Sensor
- Rotary Encode Module
- Tilt Switch Module
- Ball Switch Module
- Light Dependant Resistor Module
- Temperature and Humidity Module
- Digital Temperature Sensor
- Analog Temperature Sensor
- IR Transmitter Module
- IR Receiver

duinotech



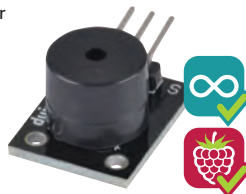
CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4288	\$99.00	\$88.95	\$78.95

## For Microcontrollers Audio & Sound:

### ACTIVE BUZZER MODULE

Use this module to generate sound from your Arduino®; libraries are available to produce different tones and frequencies.

- Operating voltage 5VDC
- Active speaker
- 3 pin header
- Dimensions: 25(L) x 15(W) 10(H)mm



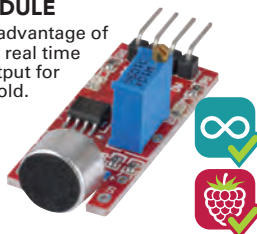
duinotech

CAT.	Qty 1+	Qty 5+
XC-4424	\$3.95	\$3.45

### MICROPHONE SOUND SENSOR MODULE

This unit is highly sensitive with the added advantage of having two outputs. An analogue output for real time microphone voltage signal, and a digital output for when the sound intensity reaches its threshold. Great to turn your Arduino® into a voice recorder or vox.

- 5VDC operational voltage
- Sensitivity potentiometer adjustment
- Dimensions: 43(L) x 16(W) x 13(H)mm



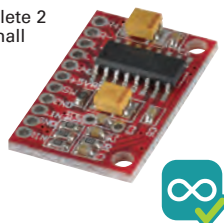
duinotech

CAT.	Qty 1+	Qty 5+
XC-4438	\$7.95	\$7.15

### 2 X 3W AMPLIFIER MODULE

This remarkably small module provides a complete 2 x 3W stereo audio amplifier. Ideal for driving small speakers and earphones. Requires no external components.

- Operating Voltage: 2.5-5.5VDC
- Output Power: 2x3W @ 4ohm
- Efficiency: >90%
- Uses PAM8403 IC.
- Amplifier type: Class-D
- Dimensions: 23(W) x 16(D) x 2(H)mm



duinotech

CAT.	Qty 1+	Qty 5+
XC-4448	\$4.95	\$4.45



This product is compatible with Raspberry Pi



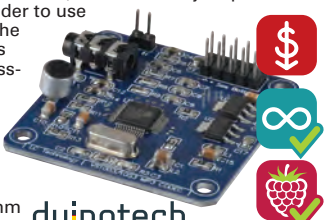
This product is compatible with Arduino®

People are accustomed to communicating with sound, and it makes sense for our Arduino® to do the same thing. From generating a warning simple tone or responding to a noise through to playing back a recorded message, there are a variety of Arduino® modules and shields for making and detecting sounds.

### MP3 RECORDING MODULE

A full featured MP3 module that supports both playback and recording. An onboard microphone is used for audio in, and a 3.5mm jack provides the output. There is also a line-in header to use an external audio source instead of the microphone. Most projects using this device will require some form of mass-storage, such as an SD card.

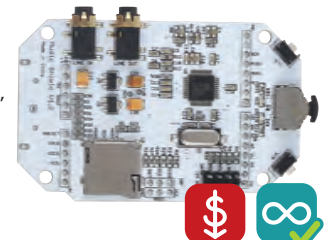
- Input power 5VDC
- Supports MP3, MP3+V, WMA, WAV, MIDI, SP-MIDI
- UART & SPI interface
- Recording format IMA ADPCM
- Dimensions: 44(L) x 44(W) x 10(H)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4516	\$24.95	\$22.45	\$19.95

### MUSIC SHIELD

A music player and recorder with professional audio quality. Capable of reading a variety of formats from the microSD card slot including MP3, WAV, MIDI, OGG Vorbis and outputs via the headphone/line out socket; recording is via the line in socket. A multifunction button is built-in and pins on Arduino® board can be assigned for various music control.

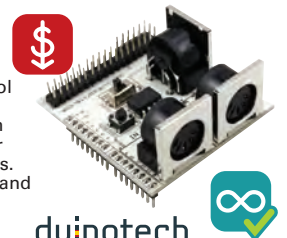


duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4544	\$49.95	\$44.95	\$39.95

### MIDI SHIELD

Add music instruments by giving your Arduino® project a powerful MIDI communication protocol. The MIDI protocol shares many similarities with standard asynchronous serial interfaces, so you can use the UART pins of your microcontroller to send and receive MIDI's event messages. The MIDI Breakout provides both MIDI-IN and MIDI-OUT connections, as well as a MIDI-THRU port.



duinotech

CAT.	Qty 1+
XC-4545	\$39.95



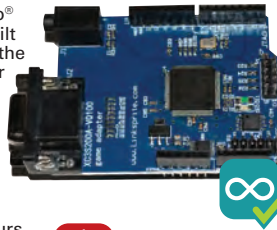


## ✓ FOR MICROCONTROLLERS - AUDIO SOUND (CONTINUED)

### GAMEDUINO

Gameduino is a game adaptor for Arduino® (or anything else with an SPI interface) built as a single shield that stacks up on top of the Arduino® and has plugs for a VGA monitor and stereo speakers. The sound and graphics are definitely old-school, but thanks to the latest FPGA technology, the sprite capabilities are a step above those in machines from the past. The adaptor is controlled via SPI read/write operations, and looks to the CPU like a 32kB RAM.

- Video Output 400x300 pixels in 512 colours
- Compatible with any standard VGA monitor (800x600 @ 72Hz)

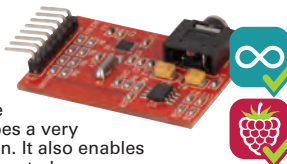


duinotech

CAT.	Qty 1+
XC-4550	\$49.95

### SI4703 FM TUNER BREAKOUT BOARD

This is a breakout board for the Silicon Laboratories Si4703 FM tuner chip. Beyond being a simple FM radio, the Si4703 is also capable of detecting and processing both Radio Data Service (RDS) and Radio Broadcast Data Service (RBDS) information. The Si4703 even does a very good job of filtering and carrier detection. It also enables data such as the station ID and song name to be displayed to the user.



duinotech

CAT.	Qty 1+
XC-4595	\$19.95

### RECORD & PLAYBACK MODULE

Add sound to your Arduino® without the complexity of MP3 modules and SD cards, using the ISD1820 based record and playback Module. Includes an on-board microphone and can drive a small speaker directly.

- Records up to 10 seconds
- Control playback from module buttons or digital inputs
- Works on 3.3V or 5V
- Can work in loop or single play mode
- Dimensions: 54 x 38 x 10mm

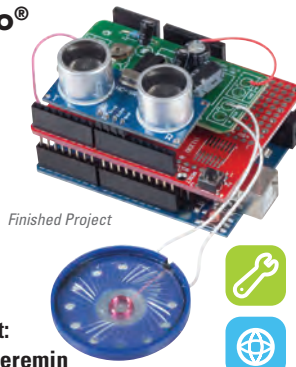


duinotech

CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4605	\$9.95	\$8.75	\$7.75

## Make Your Own: Ultrasonic Theremin Project With Arduino®

This project is ideal for the musically inclined. Just like a traditional Etherwave-Theremin, this theremin plays back samples and modulates them depending on the distance of your hand to the sensor. This simple project doesn't need many parts to get its sound because it uses a few of the special hardware features of the ATMEGA 328p chip in the Uno to do most of the work. There is some soldering needed in this project.



Finished Project



See step-by-step instructions at:  
[jaycar.com.au/diy-ultrasonic-theremin](http://jaycar.com.au/diy-ultrasonic-theremin)

### OK, WHAT IS A SHIELD?

The Arduino was originally designed by the Italians, and Italians being Italians have some weird names for things. A word that you will hear a lot on these pages is SHIELD. For the purposes of Arduino, a shield is not a thing to protect you in a swordfight, it's a description for a device that will go with another Arduino device. It could be a temperature sensor, a music generator, or even a Wi-Fi adaptor, etc. Sometimes the word 'Module' is used as well. Both terms have an interchangeability about them. Get on the programme!

## For Microcontrollers I/O Expansion:

There will eventually come a time when your Arduino® project will 'run out of pins'. While you might be able to upgrade your main board to a Mega, if that's not an option you can look at the following modules and shields to add extra controllable outputs with ease.

### I²C RGB DOT MATRIX DRIVER MODULE

A full colour RGB display driver designed to drive a tri-colour 8x8 dot matrix. Driven by an ATmega328p (The same chip as the Arduino®), this module communicates with your project via I²C. Multiple modules can be daisy chained together to make a longer sign or scrolling display.

- Operating Voltage: 5VDC
- Microcontroller: ATmega328
- Display Controller: DM163 + M54564FP
- ICSP header
- Daisy-Chainable
- Dimensions: 66(L) x 60(W) x 12(H)mm

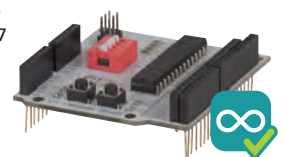


duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4498	\$34.95	\$30.95	\$27.95

### I/O EXPANDER FOR ARDUINO®/PCDUINO

Expand the number of I/Os of an Arduino® board. It is based on the chipset MCP23017 which communicates with Arduino® through an I²C interface. It adds GPIOA and GPIOB, a total of 16 I/Os. There are two LEDs and two buttons on the shield. User can decide if they want to use the built-in LED/buttons or not by using the 4-bit DIP switch.



duinotech

CAT.	Qty 1+
XC-4547	\$19.95

### 8 X 8 DOT MATRIX DRIVER MODULE

Use this module to drive an 8x8 dot matrix display. Driven by shift registers it requires only three inputs, plus power. Multiple modules can be directly daisy chained to make a longer display. Perfect for making a sign or scrolling message board. Headers are sized for a standard size 8x8 display, but it can drive any array if connected by jumpers. LED display not included.

- Operating Voltage: 5VDC
- Daisy-chainable
- Chipset: 74HC595
- Dimensions: 72(L) x 69(W) x 12(H)mm



duinotech

CAT.	Qty 1+
XC-4532	\$9.95

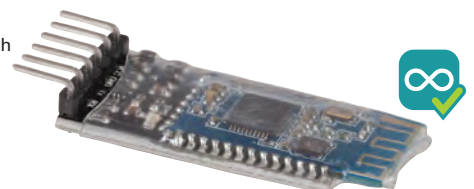
## For Microcontrollers Bluetooth®:

Bluetooth® technology is in many things around us, such as computers and mobiles phones. Allowing Arduino® to communicate with these devices via Bluetooth® can expand their functionality. From simple display of debugging data on your laptop to full control of your Arduino® robot with an app, Bluetooth® can provide the connectivity you need.

### BLUETOOTH® V4.0 BLE

Configurable as master or slave. Provides a serial communication channel.

- State status pin
- Serial interface with AT commands
- 5V IO and power



duinotech

Bluetooth®

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4382	\$29.95	\$26.95	\$23.95



## For Microcontrollers Wi-Fi/Network/Computer:

You might think it's a bit of a stretch to put an Arduino® in the same category as a computer, but with the right modules and shields, you can almost be on the same level. With a Wi-Fi or Ethernet connection, your Arduino® can be serving up web pages or communicating over great distances. Add a USB host shield, and connect a keyboard or mouse, and you've got an easy to use interface for your next project.

### LOW COST LONG RANGE DATA COMMUNICATIONS

LoRa™ is a powerful new technology enabling secure wireless data communications over long distances even several kilometres without the need of a mobile GSM network. LoRa™ can be used in many outdoor or indoor applications, such as building automation, weather monitoring, irrigation systems control, smart metering, smart cities, and much more. For more information about LoRa™ visit [www.lora-alliance.org](http://www.lora-alliance.org)

#### LONG RANGE LORA SHIELD CAT. XC-4392

The Arduino® Compatible Long Range LoRa™ shield turns your Arduino® into a LoRa™ node capable of transmitting and receiving data over long distances, even several kilometres, without the need of a GSM network. The perfect solution to your remote sensor and control projects. An external antenna is included.

- Compatible with 3.3V or 5V I/O Arduino® Board
- LoRa™ frequency Band: 915MHz
- Low power consumption
- Includes external Antenna (via I-Pex connector)

#### LONG RANGE LORA GATEWAY CAT. XC-4394

The Long Range LoRa™ Gateway allows you to connect several remote wireless LoRa™ devices, such as sensors, switch and control nodes to an IP network or the Internet, via Wi-Fi or Ethernet. A USB host port allows the gateway to be connected to a 3G/4G network using an external modem (not included).

- Internet connection via LAN, Wi-Fi
- USB host port (for 3G/4G modem connection)
- Built-in web server
- Managed by Web GUI, SSH via LAN or Wi-Fi
- Support Wi-Fi AP, Client or Ad-Hoc(Mesh) mode
- 9 x Digital, 7 x Analogue I/O, 2 x PWM, 1 x I²C
- Arduino® IDE compatible. Easy to program
- LoRa™ frequency band: 915 MHz

*Note: Radio transmitting devices must be used in accordance with Australian Communications & Media Authority guidelines ([www.acma.gov.au](http://www.acma.gov.au))*

	CAT.	Qty 1+	Qty 3+	Qty 6+
LoRa Shield	XC-4392	\$69.95	\$62.95	\$55.95
LoRa Gateway	XC-4394	\$149.00		

### USB HOST EXPANSION BOARD

Brings the ubiquitous USB Host connectivity to your Arduino® project. This shield even supports Google Android® ADK allowing connections to Smartphones and Tablets. The USB port can also be used with a USB hub.

- Supports HID: keyboards, mice, joysticks, etc.
- Supports mass storage devices: USB sticks, memory card readers, external hard drives, etc.
- Dimensions: 55(W) x 54(D) x 23(H)mm

	CAT.	Qty 1+	Qty 5+
	XC-4456	\$39.95	\$35.90

### YUN WI-FI SHIELD

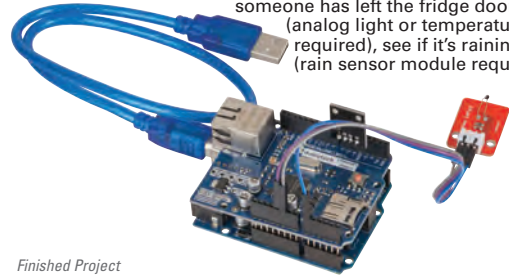
The Yun Shield is a complete compact Linux computer based on the OpenWRT firmware which can be controlled by your Arduino® Main Board. It features Wi-Fi, ethernet, USB and Serial interfaces. Connect a 3G dongle to provide connectivity for your Arduino® on the go, or use it as a gateway for your IoT projects. Can also program an attached Arduino® board via Wi-Fi.

- Web configuration interface
- 77mm x 54mm x 26mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4388	\$69.95	\$62.95	\$55.95

## Make Your Own: Ethernet IO Controller With Arduino®

This clever project uses our XC-4412 ethernet shield to connect your Arduino® to a wired network so you can access it across the Internet. See and change the current state of the IO pins, so you can turn devices on and off remotely across the Internet. Use it to turn on the lights in another room (relay module required), see if someone has left the fridge door open (analog light or temperature sensor required), see if it's raining outside (rain sensor module required).



Finished Project

See step-by-step project instructions and code at: [www.jaycar.com.au/diy-ethernet-controller](http://www.jaycar.com.au/diy-ethernet-controller)

### ETHERNET SHIELD

A network shield that will allow the user to set their Arduino® up as web server, control your project over your network or even allow your Arduino® to connect to the World Wide Web.

- 10/100Mb Ethernet port
- Reset button
- microSD card slot
- Stackable headers
- Dimensions: 69(L) x 48(W) x 14(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4412	\$39.95	\$35.90	\$31.90

### ESP-13 WI-FI SHIELD

Using the powerful ESP8266 IC, the ESP-13 Wi-Fi Shield adds much more than just plain Wi-Fi to your Arduino®. It has an 80MHz processor and can also act as an access point or web server. An excellent way to get into the Internet of Things (IoT).

- Integrated TCP/IP stack
- Simple AT command interface with Arduino® main board
- Can be programmed directly with Arduino® IDE (separate programmer needed)
- Switches on shield to disconnect from Arduino®
- Dimensions: 68 x 52 x 12mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
	XC-4614	\$39.95	\$35.95	\$31.95

### RS-232 TO TTL UART CONVERTER MODULE

This tiny module allows you to connect a legacy device (or computer) to your existing Arduino® board. Providing a full RS-232 port, this shield allows you to directly communicate with a huge variety of serial peripherals.

- Supports TX and RX signals
- Four pin header for 5V, GND, TX and RX signals
- Micro USB socket for optional power input
- Genuine RS-232 compatible signals on D9 socket

	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-3724	\$9.95	\$8.95	\$7.95

## For Microcontrollers IR / RF:

We'd be pretty lost without wires connecting everything together, but sometimes it can be handy to make the connection without getting all tangled up. Check out the shields and modules below for ways to connect wirelessly. Alternatively, control an existing wireless device like the IR remote on your TV, or get data from the 433MHz transceiver on your weather station.

### IR REMOTE CONTROL FOR ARDUINO

Forget borrowing the TV remote to add IR remote control to your next Arduino® project, and give it its own dedicated remote. Compact design with 21 buttons including numbers and channel controls. Takes a single CR2025 battery.

- NEC modulation works with 'irremote' library
- Pocket size with numeric keypad
- Easily add IR control to your next project with XC-4427

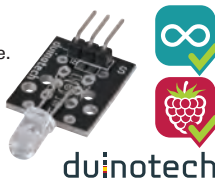


	CAT.	Qty 1+	Qty 4+	Qty 10
IR Remote Control for Arduino	XC-3718	\$9.95	\$8.95	\$7.95

### INFRARED TX MODULE

Use this device to send data over infrared. Use your Arduino® to control your TV or Media Centre. Combine it with our RX module (XC-4427) and you have simple wireless communication. You could also use it to control one of our infrared RC helicopters!

- Operating Voltage: 5VDC



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4426	\$4.95	\$4.45	\$3.95

### INFRARED RX MODULE

Receive data sent via infrared, this module can read the signals sent by most IR remote controls. Pair it with the TX Module (XC-4426) to make a universal remote control.

- Operating Voltage: 5VDC



	CAT.	Qty 1+	Qty 5+
	XC-4427	\$3.95	\$3.45

### 2.4GHZ RF MODULE

Based on the NRF24L01 transceiver IC, this module allows communication on the license free ISM band. Despite its diminutive size, it supports on-air data rates of up to 2Mbps. No external components are required (other than your Arduino®).

- Operating Voltage: 3.3V (5V tolerant logic)
- Output Power: 1mW
- Chipset: NRF24L01
- Ultra low power consumption
- Protocol: SPI
- Dimensions: 33(L) x 14(W) x 9(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4508	\$9.95	\$8.75	\$7.75

### 433MHZ WIRELESS MODULES

Pre-built 433MHz wireless transmitter / receiver modules featuring ASK encoding and are ideal for devices using short data bursts such as remote controls, trigger pulses etc.

SPECIFICATIONS	ZW-3100	ZW-3102
Output Power	3dBm.	
Supply Voltage	3VDC	5VDC
Supply Current	10mA max	
Data Rate	300bps to 10kbps	
PCB Measures (excl pins)	18.5(H) x 14.5(W)mm	42(H) x 11(W)mm

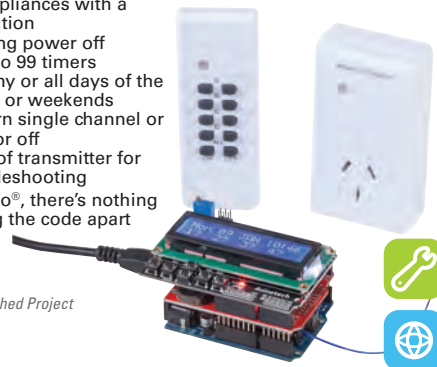
	CAT.	Qty 1+	Qty 10+	Qty 25+
Transmitter	ZW-3100	\$13.95	\$12.35	\$10.95
Receiver	ZW-3102	\$13.95	\$12.35	\$10.95

## Make Your Own: RTC Power Point Timer With Arduino®

Using Arduino® to control a 240V appliance but don't want to get zapped? Well then, here is your solution. Building on the simplicity of the Arduino® Clock, we've developed a project that interfaces to our MS-6148 Remote Controlled Mains Outlet using a 433MHz transmitter and adding some extra code, gives you a mains timer with the following features:

- Switch on/off appliances with a minute of resolution
- Keeps time during power off
- Programme up to 99 timers
- Can be set for any or all days of the week, weekdays or weekends
- Can be set to turn single channel or all channels on or off
- Manual control of transmitter for setup and troubleshooting

And being Arduino®, there's nothing to stop you taking the code apart and adding your own features.



Step-by-step instructions at:  
[www.jaycar.com.au/rtcpowerpointtimer](http://www.jaycar.com.au/rtcpowerpointtimer)

### RF TRANSCEIVER MODULE

This module adds a versatile 433MHz radio to your duinotech project. Capable of transmitting and receiving over a wide frequency range, these modules allow two-way wireless communication between duinotechs. Controlled via SPI. Prewritten libraries available.

- Operating Voltage: 1.9-3.6VDC
- Frequency Range 433/898/915MHz
- Maximum Data Rate: 50kbps (with error correction)
- RF output power: 13dBm(20mW)
- Connection protocol: SPI
- Includes antenna
- Dimensions: 32(W) x 19(L) x 19(H)mm (Excluding antenna)



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4522	\$19.95	\$17.95	\$15.95

### SIM CARD BREAKOUT BOARD

This is a full 8-pin breakout for the SIM socket allowing direct access to SIM communication. Features a Lock and Open switch.

Not available in all stores but can be ordered.



duinotech

	CAT.	Qty 1+
	XC-4596	\$14.95

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required – see website, T&C or Store Manager for details.





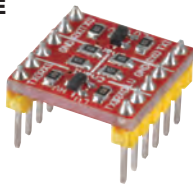
## For Microcontrollers Power/Voltage Conversion:

Getting power to your Arduino® project is fairly important, and will probably need extra components if you want to take what you're building beyond the reach of the USB cable on your computer. From charging batteries to converting between systems running off different voltages or even getting power to your breadboard, you'll find something to help amongst the modules below.

### LOGIC LEVEL CONVERTER MODULE

While most of the modules used in the Arduino® world are 5V logic, some are 3.3V. And unfortunately, connecting them directly often results in "letting out the smoke!" This little module is the answer. Provides two bi-directional channels to safely marry 3.3V with 5.0V. Drops straight into solder-less breadboard or can be soldered into your own PCBs.

- Two bi-directional channels
- 12-pin DIL package
- Dimensions: 35(W) x 31(D) x 21(H)mm



duinotech

CAT.	Qty 1+	Qty 5+
XC-4486	\$4.95	\$4.45

### LITHIUM BATTERY CHARGE MODULE

This tiny module charges a single lithium cell from a 5V supply. Ideally paired with XC-4512 DC-to-DC Converter Module to create a device that runs on a single lithium cell and recharges by USB. Output via solder tabs, Input is either via solder tabs or a mini-USB port.

- Input voltage 4.5V-5.5VDC
- Default charge rate: 1A
- Full charge voltage 4.2V
- Charge state LEDs
- Dimensions: 27(L) x 19(W) x 5(H)mm

Note: Batteries not included.



duinotech

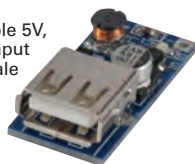
CAT.	Qty 1+	Qty 5+
XC-4502	\$4.95	\$4.45

### 5VDC BOOST MODULE

This module is capable of providing a stable 5V, from a single Li-Po or two Alkaline cells. Input is via two solder pads, output is via a female USB socket.

- Input Voltage Range: 2.5-5VDC
- Output Voltage: 5VDC
- Dimensions: 34(L) x 16(W) x 8(H)mm

Note: Batteries not included.



duinotech

CAT.	Qty 1+	Qty 5+
XC-4512	\$4.95	\$4.45

## Make Your Own: Lithium Battery USB Charger With Arduino®

A compact power solution if you need to power your Arduino® project on-the-go, or where constant 5V power is not available. Some soldering and detailed construction required.



Finished Project

See step-by-step instructions at:  
[www.jaycar.com.au/lbc](http://www.jaycar.com.au/lbc)

### DC - DC STEPDOWN MODULE

This module accepts any voltage from 4.5 - 35VDC, and outputs any lower voltage from 3-34V. Output is adjusted via a multi-turn potentiometer. Use it to run your 5V Duintech projects from a 6V, 9V or even 12V supply.

- Input voltage: 4.5 - 35VDC
- Output voltage: 4 - 34VDC adjustable
- Maximum output current: 2.5A
- Dimensions: 49(L) x 26(W) x 12(H)mm



duinotech

CAT.	Qty 1+	Qty 5+
XC-4514	\$7.95	\$7.15

### DC-DC BOOST MODULE WITH DISPLAY

The Arduino® compatible boost module can be used to provide higher voltages for your project, such as running 5V Arduino® projects from Lithium batteries.

- Output from 5V-56V
- Input range 3.5V-35V
- Max 2A input current without heatsinking
- Solder terminals
- Cannot be used to reduce voltage
- Dimensions: 66 x 35 x 12mm



duinotech

CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4609	\$19.95	\$17.95	\$15.95

## Smart Hardware Competition:

- GARRY READ, SHOPS AT JAYCAR IPSWICH

"Hi, I live on a semi rural property near Brisbane and have a garden that needs a constant water supply and no town water so we have water tanks situated higher than our residence and are able to pump excess rain water up to these tanks but they are aprox 150 M away and I always had an issue with leaving a tap on and loosing our water supply and has happened. So being totally a teckno nerd asked an electrical friend about my problem and over about 12 months have come up with this. Needless to say have learnt much about tech stuff in process. Had underground power run from property pole up hill to shed and also ran cat5 and Telstra cable at same time not sure why but sparky said good idea. So to my device I have a small solar panel charging a 12V battery sending 12V up the cat5 to a float switch on tanks when full they trigger a buzzer to let me know they are full or empty works a treat, also have three 433mhz transmitters and recievers to transmit up hill to trigger a 24V relay to open and shut water valves. Would have liked to show internal picks of boxes but all equipment is Jaycar solar panels, charge controller, buzzers, batterys, tranzmitters, boxes and cable I love how all works and am planning some more projects. Regards"



\$1000  
JAYCOINS

WINNER



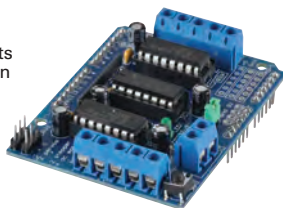
## For Microcontrollers Motor/Power Control:

Practically all motors use more power than any of the pins on Arduino® Main Board can supply, so we need to use a Motor Control Shield or Module to interface. Most motors also operate off a voltage different to 5V, and many of these Shields and Modules will provide regulation of higher input voltages down to 5V for your Arduino® main board as well. Of course, these boards aren't limited to just driving motors, they are suitable for many power control applications.

### L293D MOTOR CONTROL SHIELD

This versatile board has 2 x 5V servo ports connected to the Arduino® high-resolution dedicated timer to ensure jitter-free operation. It is also capable of driving up to 4 bi-directional DC motors with individual 8-bit speed selection, or up to 2 stepper motors with single/two/interleaved steppings.

- 5V to 16VDC
- 4 H-Bridges: per bridge provides 0.6A (1.2A peak current) with thermal protection
- 2 external terminal power interface
- Dimensions: 70(L) x 53(W) x 20(H)mm



duinotech

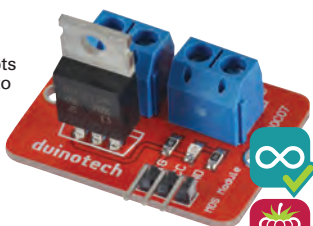


CAT.	Qty 1+	Qty 5+
XC-4472	\$12.95	\$11.35

### 24V 5A MOS DRIVER MODULE

When connected to an Arduino®, this impressive MOS driver module accepts Pulse Width Modulated (PWM) input to drive 24VDC loads. Compatible with both Arduino® and pcDuino®, making it perfect for many projects such as lighting, DC motors, pumps and solenoid.

- 3.3V & 5V DC operation
- Output load voltage 0-24VDC
- Output current 5A
- Dimensions: 34(L) x 21(W) x 16(H)mm



duinotech

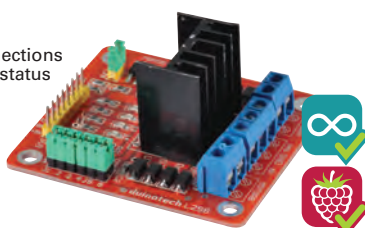


CAT.	Qty 1+	Qty 5+
XC-4488	\$7.95	\$7.15

### DUAL MOTOR CONTROLLER MODULE

Using the powerful L298N Dual Motor Driver, this module allows full control of two DC Motors or one stepper-motor. Features back-EMF and over-temperature protection, it is ideally suited to drive two-motor robot kits such as our KR-3130 and KR-3132. An on-board 5V regulator can also be used to power your project.

- Maximum output current: 4A
- Motor voltage: 3-30VDC
- Screw terminals for easy connections
- LEDs show power and output status
- Requires six digital pins
- 4 mounting holes
- Dimensions: 69(W) x 56(D) x 36(H)mm



duinotech



CAT.	Qty 1+	Qty 5+
XC-4492	\$14.95	\$13.45

### 30A CURRENT SENSOR MODULE

Monitor the motors on your next robot project with the 30A Current Sensor Module. The module outputs a voltage proportional to current passing through the sense pins on the module. Based on the ACS712 sensor IC.

- Output ratio is 66mV/A
- Can measure negative and positive current flows
- Onboard power indicator
- 5V supply required
- Current path is isolated from logic pins
- Dimensions: 31 x 13 x 15mm

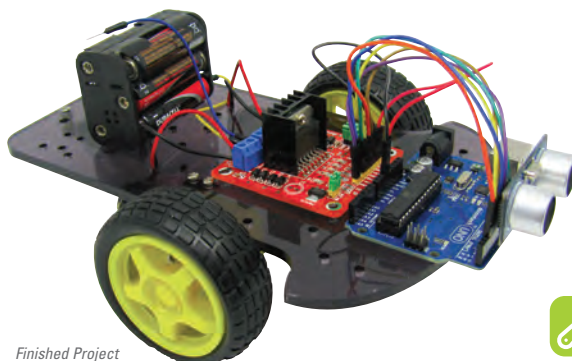


duinotech

CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4610	\$9.95	\$8.75	\$7.75

## Build Your Own: Wall Dodging Robot With Arduino®

This little robot is fitted with an ultrasonic sensor, which it uses to help navigate its surroundings. When it detects an object in front, it backs up, turns a little and then continues on its way.



Finished Project

See step-by-step instructions at:  
[jaycar.com.au/diy-dodging-robot](http://jaycar.com.au/diy-dodging-robot)



### RELAY BOARDS

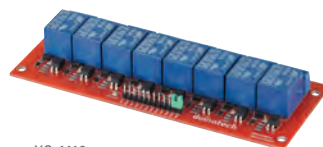
These handy relay modules provide the easiest way to use your duinotech to switch real world devices. Available in one, four and eight channel versions, these modules can switch up to 10A per channel. Includes back-EMF protection and LEDs so you can easily see the state of the outputs. The four and eight channel versions even have optical isolation to protect your duinotech. While the one channel version operates directly from 5V.

- Status LEDs show channel status
- Active High logic
- Screw terminals for easy connection to relay contact.
- SPDT Relays
- Current Ratings: 10A @ 250VAC, 10A @ 30VDC
- Four mounting holes on each module

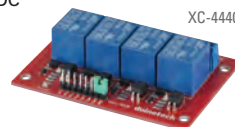
XC-4419



XC-4418



XC-4440



duinotech



CAT.	CHANNELS	SUPPLY VOLTAGE	OPTICAL ISOLATION	DIMENSIONS
XC-4419	1	5VDC	No	40(W) x 27(D) x 18(H)mm
XC-4440	4	12VDC	Yes	77(W) x 55(D) x 17(H)mm
XC-4418	8	12VDC	Yes	135(W) x 50(D) x 19(H)mm

CHANNELS	VOLTAGE	CAT.	Qty 1+	Qty 5+
1	5VDC	XC-4419	\$5.45	\$4.90
4	12VDC	XC-4440	\$12.95	\$11.35
8	12VDC	XC-4418	\$19.95	\$17.95

## Addicted to Social? We're Here to Chat!



[facebook.com/jaycarelectronics](https://facebook.com/jaycarelectronics)



[instagram.com/jaycar\\_electronics](https://instagram.com/jaycar_electronics)



[twitter.com/jaycarau](https://twitter.com/jaycarau)



[youtube.com/user/JaycarVideo](https://youtube.com/user/JaycarVideo)

## For Microcontrollers Wheels & Chassis:

Making things that move is really exciting, but it can also be challenging to build. We make it easy by providing all the bits and bolts you need to make solid and rugged moving vehicles. Combined with other components, such as the Ultrasonic proximity sensor, motor driver and any one of the Arduino® range of boards, and your next weekend project could be an impressive intelligent buggy.

### 2 OR 4 WHEEL DRIVE MOTOR CHASSIS ROBOTICS KIT

These two kits make creating your own robot easier than ever. Available in 2WD and 4WD versions; each kit includes motors, wheels, tyres and two pre-drilled mounting plates. These kits are ideal for an Arduino® or pcDuino robotics project.

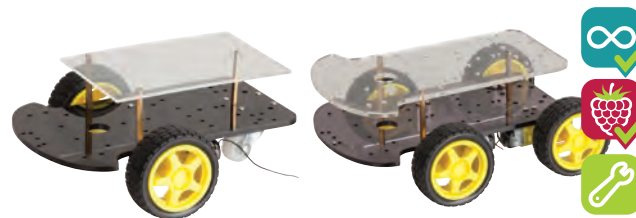
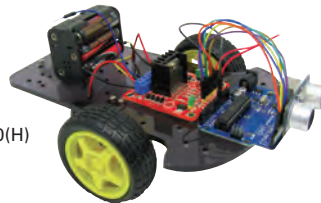
- Pre-Drilled mounting plates
- One motor + gearbox per wheel
- Motor voltage: 5-10VDC

Dimensions:

KR-3160 2WD: 215(L) x 160(W) x 100(H)mm

KR-3162 4WD: 240(L) x 160(W) x 100(H)mm

Note: Accessories not included.



KR-3160

KR-3162

	CAT.	Qty 1+	Qty 3+	Qty 6+
2 Wheel	KR-3160	\$39.95	\$35.95	\$31.95
4 Wheel	KR-3162	\$49.95	\$44.95	\$39.95

### DC GEARED MOTOR WITH RUBBER WHEEL

DC geared motor with rubber wheel suitable for your Arduino® vehicle based/robotics applications. Also a suitable replacement for the 2WD (KR-3160) and 4WD (KR-3162) car chassis.

- DC motor: Working voltage 5-10VDC
- Gear ratio: 48:1
- 1 x plastic tyre wheel / 1 DC Gear Motor
- Bi axial can match speed encoder
- Convenient speed measurement
- Dimensions: 66(Dia.) x 28(W)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	YG-2900	\$9.95	\$8.75	\$7.75

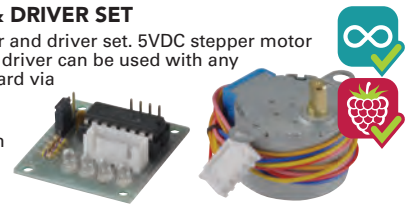
## For Microcontrollers Steppers & Servos:

Stepper and servo motors are used whenever you want to precisely control rotation or angular motion. Many DIY 3D printers utilise several stepper motors controlled by an Arduino® based controller. We have a wide range of stepper and servo motors to suit different applications.

### 5V STEPPER MOTOR & DRIVER SET

A small and versatile motor and driver set. 5VDC stepper motor controlled by the ULN2003 driver can be used with any Arduino® or compatible board via jumper leads.

- 5VDC stepper motor
- Stepper motor size: 28mm diameter
- Step angle 5.625 x 1/64
- Reduction ratio 1/64
- LED indicators
- Driver board size: 35(L) x 32(W) x 10(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4458	\$9.95	\$8.75	\$7.75

### PAN & TILT ACTION CAMERA BRACKET MOUNT FOR 9G SERVOS

This camera bracket mount is the easy way to add pan and tilt functionality to your next robot or Arduino® project. Add two 9G servos (YM-2758) to complete assembly. The clips on the front are designed for an action camera to clip straight in. Or even mount an XC-4442 Ultrasonic Sensor and create an Arduino® controlled sonar, or an XC-4478 Accelerometer to create a levelling gimbal. Easy to assemble.

- Clamp for servo wires
- Servos not included
- Dimensions: 35 x 55 x 35mm (Assembled)

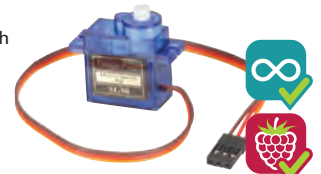


	CAT.	Qty 1+	Qty 5+	Qty 10+
	XC-4618	\$4.95	\$4.45	\$3.95

### 9G MICRO SERVO MOTOR

Micro servo motor, perfect for use with XC-4618 Pan and Tilt bracket. Small enough to connect directly to an Arduino® Board for experimenting.

- 3.5V- 6V Supply Voltage
- 500 degrees/second at 6V
- 1.6kg.cm at 4.8V
- Dimensions: 30 x 30 x 10mm
- Cable Length: 250mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	YM-2758	\$9.95	\$8.75	\$7.75

## Tech Talk: Sketches Defined

The sketch is the program that is compiled by the Arduino® IDE and uploaded to your main board. This is the software part of any Arduino® project. One of the great things about the Arduino® community is that they love to share ideas, and sketches can be found in the Arduino® IDE and in many places where users show off their projects on the internet.

```

Sketch
23 // these constants won't change:
24 const int analogPin = A0; // the pin that the potentiometer is attached to
25 const int ledCount = 10; // the number of LEDs in the bar graph
26
27 int ledPins[] = {
28   2, 3, 4, 5, 6, 7, 8, 9, 10, 11
29 }; // an array of pin numbers to which LEDs are attached
30
31
32 void setup() {
33   // loop over the pin array and set them all to output:
34   for (int thisLed = 0; thisLed < ledCount; thisLed++) {
35     pinMode(ledPins[thisLed], OUTPUT);
36   }
37 }
38
39 void loop() {
40   // read the potentiometer:
41   int sensorReading = analogRead(analogPin);
42   // map the result to a range from 0 to the number of LEDs:
43   int ledLevel = map(sensorReading, 0, 1023, 0, ledCount);
44
45   // loop over the LED array:
46   for (int thisLed = 0; thisLed < ledCount; thisLed++) {
47     // if the array element's index is less than ledLevel,
48     // turn the pin for this element on:
49     if (thisLed < ledLevel) {
50       digitalWrite(ledPins[thisLed], HIGH);
51     }
52     // turn off all pins higher than the ledLevel:
53     else {
54       digitalWrite(ledPins[thisLed], LOW);

```

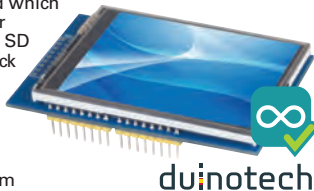
## For Microcontrollers Input & Control:

With any Arduino® project, there'll be a point where you need to provide some input to tell it what to do. From steering a robot in real-time to changing a setting occasionally, there's a shield or module that will help you control your sketch.

### 240X320 LCD TOUCH SCREEN FOR ARDUINO®

A large, colourful touch display shield which piggy-backs straight onto your Uno or Mega. Display photos from the Micro SD card slot on the display to create a slick and professional-looking project.

- 320x240 pixel resolution
- Fast Parallel interface
- Micro SD Card slot
- Resistive touch interface
- Dimensions: 77(L) x 52(W) x 19(H)mm

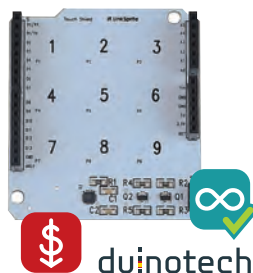


duinotech

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4630	\$29.95	\$26.95	\$23.95

### TOUCH SHIELD

The MPR121 IC is a great way to build simple capacitive touch interfaces, and now it's even easier to incorporate into your Arduino® projects with the touch shield. The touch shield has 9 capacitive touch pads, with headers for the remaining 3 electrode connections. With this shield you can have a total of 12 touch sensitive buttons. An on-board logic level converter allows it to work with 5V and 3.3V Arduino® boards. Simply solder on some header pins and stack it on to your Arduino® for a convenient input device.



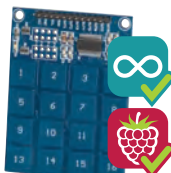
duinotech

CAT.	Qty 1+
XC-4551	\$19.95

### 16 KEY TOUCH KEYPAD MODULE

A compact 16 key touch interface for your Arduino® project, based on the TTP229 capacitive touch sensor IC. Use the module as it is, or extend wires from the pads to create external touch pads.

- Works on 2.4-5.5V
- Onboard power indicator
- Two wire serial data interface
- Dimensions: 65 x 50 x 12mm



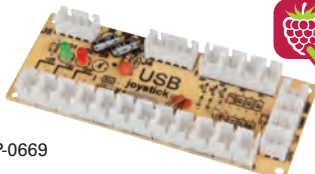
duinotech

CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4602	\$9.95	\$8.75	\$7.75

### USB INTERFACE FOR JOYSTICK AND BUTTONS

If you're building your own arcade game, whether it's with a PC or Raspberry Pi, you'll need a joystick. This interface board allows you to easily interface joysticks like our SM-1052 and arcade pushbuttons like SP-0662, SP-0664, SP-0665, SP-0666 and SP-0669 into any device that can connect to a USB joystick. It could be used for arcade games, flight simulators or anything that works with a USB joystick.

- Up/Down/Left/Right inputs
- 12 button inputs
- Detachable USB lead for fitting through small holes
- Includes 10 pluggable leads that connect directly to spade terminals on SM-1052, SP-0662, SP-0664, SP-0665, SP-0666 and SP-0669



CAT.	Qty 1+	Qty 4+	Qty 10+
XC-9046	\$19.95	\$17.95	\$15.95

### COMPATABILITY ICONS:

To assist you in selecting compatible products for your preferred microcontroller, we have created two icons. They should help you select appropriate modules and hardware. If in doubt, ask our friendly team.

Arduino® Compatible



Raspberry Pi Compatible



## Build Your Own: LED Tester With Arduino®

A handy little tool that can help you out if you work with LEDs, especially if you are always trying to work out the right resistor to make them work. The idea has been inspired by Dave Cook's model at <http://robotroom.com/LED-Tester-Pro-1.html>. We have written the code from scratch to suit the parts we have available in the duinotech range.

- Adjustable test current
- Displays LED Forward Operating voltage
- Calculates ideal resistor & gives cat. number for a design voltage and current
- Only 3 discrete components to be soldered
- Detachable shields - pull it apart & use for other projects



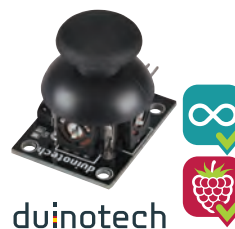
Finished Project

See step-by-step project instructions and code at:  
[www.jaycar.com.au/diy-arduino-led-tester](http://www.jaycar.com.au/diy-arduino-led-tester)

### XY JOYSTICK MODULE

This handy module gives you X & Y axis control for your Arduino® project. The board is interfaced through 5 pin header and provides a small game-pad style joystick. There is also a tactile switch when you push the stick down.

- Operating Voltage: 3-5VDC
- Digital output for tactile switch
- X & Y axis analog outputs
- Dimensions: 47(L) x 25(W) x 32(H)mm



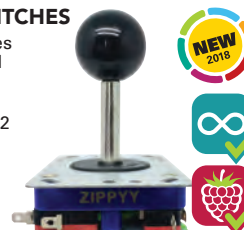
duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4422	\$5.95	\$5.35	\$4.75

### ARCADE JOYSTICK WITH MICROSWITCHES

Solidly built joystick is ideal for arcade games and emulators or anything that needs digital directional controls.

- SPST Microswitches for reliable operation
- Adjustable restrictor plate with options for 2 way, 4 way and 8 way
- Metal mounting plate and main shaft
- Removable knob for easy mounting



	CAT.	Qty 1+	Qty 10+	Qty 25+
Arcade Joystick	SM-1052	\$19.95	\$17.95	\$15.95

### ILLUMINATED ARCADE BUTTON

Brightly coloured illuminated pushbutton switches ideal for creating a custom arcade machine, or even use as a large illuminated pushbutton for a control panel. Suits 25mm mounting hole.

- SPDT Microswitch for reliable operation
- All connections are 6.3mm spade
- Includes LED illumination suitable for 12V



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SP-0662	\$9.95	\$8.95	\$7.95
Yellow	SP-0664	\$9.95	\$8.95	\$7.95
Green	SP-0665	\$9.95	\$8.95	\$7.95
Blue	SP-0666	\$9.95	\$8.95	\$7.95
White	SP-0669	\$9.95	\$8.95	\$7.95

### LED PUSHBUTTON MODULE FOR ARDUINO

A simple pushbutton module with a green LED, ideal for adding an input to a breadboard design or other project.

- Tactile Pushbutton and Green LED
- LED lights up when button pressed (can be changed with jumpers/wiring)
- 5V and 3.3V compatible



CAT.	Qty 1+	Qty 5+
XC-3722	\$9.95	\$8.95



## For Microcontrollers Displays:

One of the most useful things a device can do is communicate information to us- our smartphones wouldn't be much use without their screens! Your Arduino® is much the same, and most projects require some information to be communicated about the sensors they're reading, or how they're doing at the little task we've set them to. Here's a guide to the many different displays that make up the Arduino® range, and some tips on choosing the best one for your application. Whether it be reading out a single number or some brief words, or even a complex graphical display, there's one to suit your project.

### 128X128 LCD SCREEN MODULE

A compact Colour TFT-LCD display supporting 16 bit colour at 128x128 pixels, and only needing six pins for full control. Features ST7735 Chipset.

- SPI interface
- Separate LED backlight control
- Mounting holes
- Dimensions: 43(L) x 30(W) x 12(H)mm



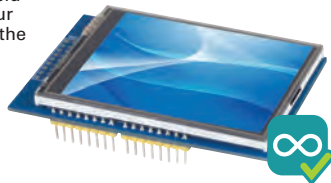
duinotech

CAT.	Qty 1+	Qty 4+
XC-4629	\$19.95	\$17.95

### 240X320 LCD TOUCH SCREEN

A large, colourful touch display shield which piggy-backs straight onto your Uno or Mega. Display photos from the Micro SD card slot on the display to create a slick and professional-looking project.

- 320x240 pixel resolution
- Fast Parallel interface
- Micro SD Card slot
- Resistive touch interface
- Dimensions: 77(L) x 52(W) x 19(H)mm



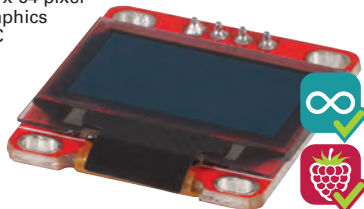
duinotech

CAT.	Qty 1+	Qty 4+
XC-4630	\$29.95	\$26.95

### MONOCHROME OLED DISPLAY MODULE

A tiny Arduino® compatible 128 x 64 pixel OLED display. Monochrome graphics with wide viewing angle and I²C interface.

- SSD1306 Chipset
- 22mm x 22mm x 12mm



duinotech

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4384	\$29.95	\$26.95	\$23.95

### KEYPAD SHIELD WITH LCD

Comes with a built-in 16 character by 2 line LCD display with backlight, this six push button keypad allows you to create a user friendly interface for your project. The keypad consists of up, down, left, right, select and also a reset button. Perfect to use as a selection menu.

- 16 Characters x 2 lines (32 Characters)
- Contrast adjust knob
- LED Backlight
- 4 Bit Arduino® LCD Library
- Dimensions: 80(W) x 58(D) x 20(H)mm



duinotech

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4454	\$19.95	\$17.95	\$15.95

At first, you may think that Arduino has far more accessories than Raspberry Pi. As you can see by the interchangeability logos, this is not necessarily the case. The modules/shields in this section were probably devised for the Arduino originally but it was quickly established that they are ok for the Pi as well.

## Make Your Own: Pong Game With Arduino®

Create your own version of the classic Pong game with one of our super bright LED matrix boards and an Arduino® Nano. Make a stylish talking point for your wall or coffee table, or just a fun game to play. Easy to assemble with duinotech parts & no soldering, this retro project is something all ages can enjoy.

Finished Project

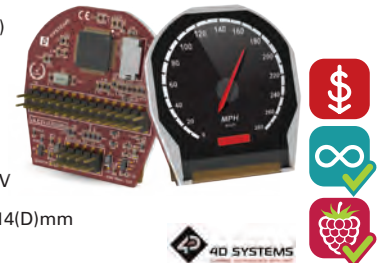


See step-by-step project instructions and code at: [www.jaycar.com.au/diy-pong-game](http://www.jaycar.com.au/diy-pong-game)

### INTELLIGENT 1.3" ROUND LCD MODULE

This innovative circular display is ideally suited to graphical gauges, needle-meters and robotics projects. This display is easy to program and interface to your project with 4D systems free Workshop-4-IDE software. A 2GB microSD card is provided to store graphical elements. Additional inputs and outputs are available to augment your project. See our website for full feature list.

- Resolution: 220 x 220 (Round)
- Colours: 65K
- 16 GPIO pins
- 4 Analog Inputs
- Up to 6 PWM outputs.
- Up to 3 SPI ports
- Up to 4 Serial TTL ports
- Up to 3 I²C ports
- PWM Audio output, play .WAV files from SD card
- Dimensions: 43(L) x 47(W) x 14(D)mm

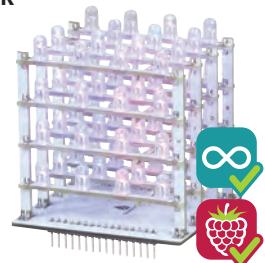


CAT.	Qty 1+
XC-4284	\$69.95

### RGB LED CUBE KIT WITHOUT DRIVER

Here's a stunning piece of art-meets illumination that you can build yourself. Features 64 individually addressable RGB LEDs arranged as a 4x4x4 matrix. Sleek white PCBs give the completed project an ethereal appearance that is sure to enchant all who behold it.

- Requires XC-4498 RGB LED driver board



duinotech

CAT.	Qty 1+
XC-4624	\$29.95

### ACRYLIC ENCLOSURE FOR XC-4624 RGB LED CUBE

This enclosure is made from tough 2.5mm acrylic, and houses the XC-4624 LED Cube Kit. It protects it from damage, and makes it look great!



duinotech

SPECIFICATIONS	XC-4625
Weight	115g
Dimensions	82 x 82mm, 100 x 70mm
Thickness	2.5mm

CAT.	Qty 1+
XC-4625	\$14.95



## FOR MICROCONTROLLERS: DISPLAYS (CONTINUED)

### RGB LED STRIP MODULE

Strip of eight RGB LEDs which can be controlled by a single Arduino® pin. Up to 1000 LEDs can be daisy chained and run from one pin.

- 5V supply.
- Eight RGB LEDs
- Each channel has 256 brightness levels
- Current draw 500mA per module maximum
- 54mm x 10mm x 3.5mm



duinotech

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4380	\$9.95	\$8.95	\$7.95

### 8 DIGIT 7 SEGMENT DISPLAY MODULE

Building a project with heaps of 7-segment displays is always going to look awesome, but unless you have the right hardware, it can use up a lot of IO pins. The MAX7219 based 8 Digit 7 Segment Display module takes care of that, running all eight digits from just three IO pins. Extra units can be daisy-chained from the end of the previous unit for truly huge displays.

- SPI interface
- 15mm panel height with red 9mm digits
- MAX7219 features dimming and digit decoding



CAT.	Qty 1+	Qty 4+	Qty 10
8 Digit 7 Segment Display Module	XC-3714	\$9.95	\$8.95 \$7.95

### LED TRAFFIC LIGHT MODULE FOR ARDUINO

RED, YELLOW, GREEN. Stop, Caution, Go. These are universal colour codes, and this Arduino® module has many uses. From creating a miniature set of traffic lights for understanding how they work, through to building a model roadway or even setting up a basic status display for your next project.

- 10mm Red, Yellow, Green LEDs
- Inbuilt dropping resistors
- Right angle plugs for standing up in breadboard
- Common ground connection



CAT.	Qty 1+	Qty 5+
XC-3720	\$12.95	\$11.45

### LOL SHIELD

The LoL Shield is a charlieplexed LED matrix for the Arduino®. LEDs are individually addressable so you can use it to display anything in a 9 x 14 grid. Scroll text, play games or display images, you can choose to use the LoL Shield Library or program the animation manually.

- 126 individually controlled LEDs
- Great DIY solder project



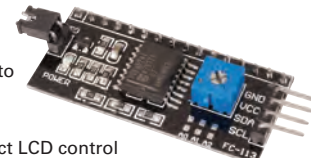
duinotech

CAT.	Qty 1+
XC-4546	\$19.95

### I²C PORT EXPANDER MODULE FOR LCD'S

The HD44780 compatible LCDs are great for displaying text and simple graphics, but quickly use up your available microcontroller pins. Using the PCF8574 port expander IC, you can control these LCDs using just 2 pins via I²C. The breakout board offers pin multiplexing, contrast control pot, LED backlight jumper control, and up to 24 unique addresses via solderable jumpers.

- Designed to solder directly to 16pin SIL headers
- Mounts behind LCD panel, taking up minimal space
- Arduino® libraries offer direct LCD control

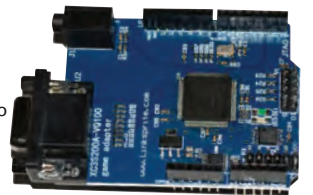


CAT.	Qty 1+	Qty 4+	Qty 10
I²C Port Expander for LCD's	XC-3706	\$9.95	\$8.95 \$7.95

### GAMEDUINO

Gameduino is a game adaptor for Arduino® (or anything else with an SPI interface) built as a single shield that stacks up on top of the Arduino® and has plugs for a VGA monitor and stereo speakers. The sound and graphics are definitely oldschool, but thanks to the latest FPGA technology, the sprite capabilities are a step above those in machines from the past. The adaptor is controlled via SPI read/write operations, and looks to the CPU like a 32Kb RAM.

- Video Output 400x300 pixels in 512 colours
- Compatible with any standard VGA monitor (800x600 @ 72Hz)

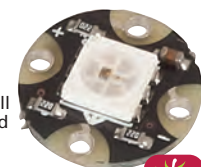


CAT.	Qty 1+
XC-4550	\$49.95

### WS2812 RGB LED MODULE

The WS2812 RGB LED module provides full PWM control of the three LED channels in a single IC with control from a single pin. The IC is mounted on a small PCB that suits 0.1" pitch protoboards and breadboards. Can daisy-chain modules.

- Great for creating custom RGB LED displays
- Same IC as XC-4380 Arduino module



CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-0272	\$4.95	\$4.45	\$3.45

## Smart Hardware Competition:

- MATT WILSON,  
SHOPS AT JAYCAR GORE HILL

"This has to be the simplest entry ... All components from Jaycar. It's just a couple of microswitches (one for each door) at the top of the pantry, which then turns on the LED strip lighting that is on the left hand side front surface when either door is opened. Transformer power cord feeds through a hole in the cupboard and plugs into the powerpoint behind the fridge. It's simple, but the difference is night and day for my wife! This is her favourite project of mine."





## For Microcontrollers Matrix Display & Control:

Matrix displays offer a cost effective way of creating large signage. The matrix display modules can be combined into multiple rows and columns to create a display as large as you need. Choose from the large range of monochrome or colour matrix display modules, microcontroller driven drivers, and any one of the Arduino® microcontroller boards and you can create an impressive scrolling text and image display board.

### 8 X 8 LED DOT MATRIX MODULE

A 64 x red LED matrix, this module is easily controlled with the LedControl library. Display your own custom characters, or use multiple modules together to make a scrolling display.

- Operating Voltage: 5VDC
- Protocol: SPI
- Chipset: MAX7219
- LED Colour: RED
- Dimensions: 62(W) x 32(H) x 14(D)mm



CAT.	Qty 1+	Qty 5+
XC-4499	\$7.95	\$7.15

### 8 X 8 DOT MATRIX DRIVER MODULE

Use this module to drive an 8x8 dot matrix display. Driven by shift registers it requires only three inputs, plus power. Multiple modules can be directly daisy chained to make a longer display. Perfect for making a sign or scrolling message board. Headers are sized for a standard size 8x8 display, but it can drive any array if connected by jumpers. LED display not included.

- Operating Voltage: 5VDC
- Daisy-chainable
- Chipset: 74HC595
- Dimensions: 72(L) x 69(W) x 12(H)mm

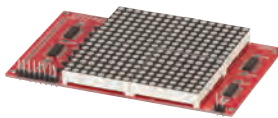


CAT.	Qty 1+
XC-4532	\$9.95

### 16X16 LED DOT MATRIX MODULE

A compact LED Matrix display featuring 256 individually addressable LEDs. Stack multiple boards side by side for a larger display.

- 5V supply required
- 74HC138 decoder IC's
- Includes jumper cables and header strips
- Dimensions: 113 x 64 x 12mm



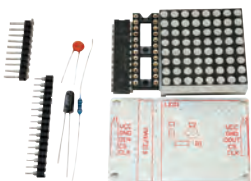
CAT.	Qty 1+	Qty 5+
XC-4607	\$29.95	\$26.95

### LED MATRIX KIT

This 8x8 LED matrix kit is powered by MAX7219 and it only needs 3 data lines and 2 power lines. It is easy to use and has adjustable brightness. Usually used as electronic display panel. Can be driven in parallel or serial and takes less than 0.1s to light up all 8 rows/columns so a dynamic display can be achieved in either connection.

Includes:

- Chipset: MAX7219
- Electrolytic capacitor: 10uF/25V
- Resistor: 10K
- Capacitance: 0.1uF
- Headers and receptacles
- LED Matrix dimensions: 52(L) x 34(W)mm



Not available at all stores but can be ordered.

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4592	\$24.95	\$22.45	\$19.95

### I²C RGB DOT MATRIX DRIVER MODULE

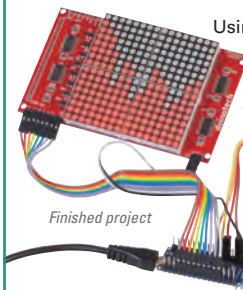
A full colour RGB display driver designed to drive a tri-colour 8x8 dot matrix. Driven by an ATmega328p (The same chip as the Arduino®), this module communicates with your project via I²C. Multiple modules can be daisy chained together to make a longer sign or scrolling display.

- Operating Voltage: 5VDC
- Display Controller: DM163 + M54564FP
- Daisy-Chainable
- Microcontroller: ATmega328
- ICSP header
- Dimensions: 66(L) x 60(W) x 12(H)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4498	\$34.95	\$30.95	\$27.95



## Make Your Own: Duinotech Audio Matrix Spectrum



Using our compact XC4607 Matrix LED display, this project will give you a small spectrum display that you can sit on your desk, or even next to a speaker. As well as an instantaneous level display, there is also a peak level 'waterfall' effect. There is no soldering required, and it only uses a handful of parts.

See step-by-step instructions at:  
[jaycar.com.au/audio-matrix-spectrum](http://jaycar.com.au/audio-matrix-spectrum)



### 84 X 48 DOT MATRIX LCD DISPLAY MODULE

These compact LCD displays are identical to those found in some old Nokia phones, and feature the PCD8544 chipset. An easy way to add a small black and white graphics display to your project.

- 8 pin plug
- SPI interface
- Four mounting holes
- Can work off 3.3V or 5V supply
- Needs 10k resistors for IO pins if running off 5V
- Dimensions: 44 x 44 x 13mm

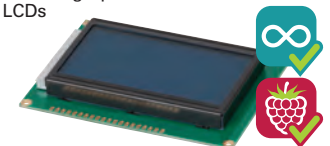


CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4616	\$19.95	\$17.95	\$15.95

### 128 X 64 DOT MATRIX LCD DISPLAY MODULE

A larger display than XC-4616 with cool blue graphics on white background. Similar to the character LCDs with inbuilt character ROM, but the flexibility to show graphics as well.

- 5V supply
- 128 pixels wide by 64 pixels high display
- 8 bit, 4bit and serial interfaces available
- White backlight

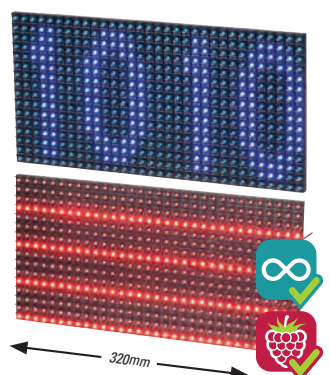


CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4617	\$29.95	\$26.95	\$23.95

### LARGE DOT MATRIX LED DISPLAY PANELS

Large 32 x 16 pixel LED display for your Arduino® to create message boards, clocks, spectrum analysers, games for the home, office, shop, etc. The controller circuitry is built onboard so the display only needs six digital pins to control all 512 LEDs.

- 10mm LED pitch
- Can be daisy-chained for larger displays
- Use a 5V 3A Power Supply (MP-3480) for full brightness
- Dimensions: 320(W) x 160(H) x 30(D)mm



	CAT.	Qty 1+	Qty 5+
Red	XC-4621	\$34.95	\$30.95
White	XC-4622	\$39.95	\$35.95
Blue	XC-4623	\$49.95	\$44.95



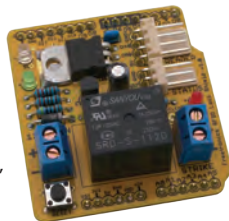
## For Microcontrollers NFC & RFID:

RFID technology is one of those things that is everywhere around us, including security systems, bank cards, public transport cards and even passports. Using a RFID module or shield you can read (and write to, depending on how secure they are) RFID cards and interact with NFC enabled items like mobile phones.

### RFID DOOR LOCK SHIELD

This shield allows your Arduino® to control a door lock using an electric strike plate and one of a number of commonly available RFID modules. Based on a project in the book Practical Arduino®, which includes extensive documentation. Example source code online.

- Supported readers include ID12, ID20, RDM630, RDM680, HF MultiTag, and many others
- Connections for RFID reader module, external status LEDs, and manual release button (not included)
- Output to control 12V electric door strike
- Power pass-through jumper
- Reset button wired through to Arduino® reset pin
- Blue "Arduino® power" LED
- Green "External power" LED
- Red "Strike plate activated" LED
- Prototyping area
- Dimensions: 49(W) x 54(D) x 27(H)mm



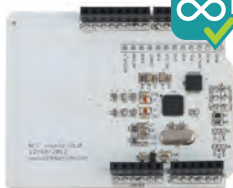
CAT.	Qty 1+
XC-4215	\$9.95

### NFC SHIELD

Brings Near Field Communication technology to your Arduino® project. Similar to RFID, NFC allows reading of cards, tags and Smart Posters when they come in close contact. The technology has many applications including quick Bluetooth® pairing, attendance recording, authentication or even Smart Cashless purchases. Comes with both the NFC shield and also a rewritable tag.

- Operating Voltage: 5V
- Interface: SPI
- Supported Card: Mifare One
- Maximum Communication Distance: 29mm
- Dimensions: 69(L) x 56(W) x 18(H)mm

*Not stocked at all stores but can be ordered.*



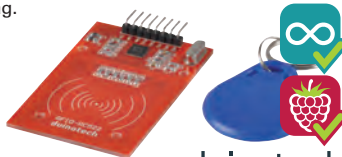
duinotech

CAT.	Qty 1+
XC-4542	\$26.95

### RFID READ & WRITE KIT

This RFID module allows you to both read and write MiFare-Type RFID cards. Create your own contactless security lock. Includes one credit-card style tags and one key-fob style tag.

- Operating Voltage: 3.3V
- Communications Protocol: SPI
- RFID Protocol: MiFare
- Includes 1 x card and 1 x fob
- Dimensions: 66(L) x 40(W) x 7(H)mm



duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4506	\$19.95	\$17.95	\$15.95

### SPARE 13.56MHZ RFID/NFC CARD & FOB

Suits XC-4506, XC-4542 and some Android phones.

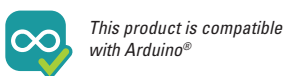
- 1kB data space



	CAT.	Qty 1+	Qty 4+	Qty 10+
Spare Fob - 40 x 32 x 4mm	ZZ-8970	\$4.95	\$4.45	\$3.95
Spare Card - 85 x 54 x 1mm	ZZ-8978	\$3.95	\$3.55	\$3.15



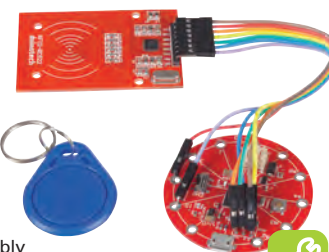
This product is compatible with Raspberry Pi



This product is compatible with Arduino®

## Make Your Own: RFID Password Typer Project

Tired of typing your password every time you need to log into your computer? Then we have just the thing for you. Carry around an RFID tag (or even use a card you might already have in your wallet), and simply wave it over the reader. Your password is typed for you! Wave the card again, and if you are using Windows, your computer is locked. Some soldering, assembly and programming required.



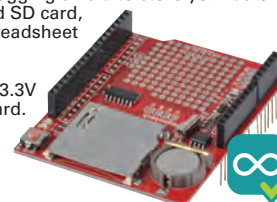
*Finished Project*

See step-by-step instructions at:  
[www.jaycar.com.au/rfid-password-typer](http://www.jaycar.com.au/rfid-password-typer)

### DATA LOGGING SHIELD

Extremely easy to set up. Use this datalogging shield to store your data to files on any FAT16 or FAT32 formatted SD card, or have it to be read by any plotting, spreadsheet or analysis program. All data stored is timestamped in real-time so you know precisely what happened when! Uses a 3.3V converter to avoid damaging your SD card. Includes a 3V button battery.

- Stackable headers
- Reset button
- Changeable CR1220 battery
- 102 solder pads
- Dimensions: 43(L) x 17(W) x 9(H)mm



duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4536	\$19.95	\$17.95	\$15.95

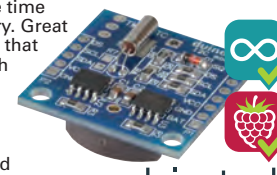
## For Microcontrollers Clock & Timing:

If you have a project that needs to keep time, even when your Arduino® is powered down, then check out these modules and shields. Sporting a 'Real Time Clock', they have a small battery backed IC which keeps track of the seconds, minutes, hours, days and even years. Operation times of a year can be expected – even longer if the project has external power.

### REAL TIME CLOCK (RTC) MODULE

This tiny little module will keep accurate time using the supplied CR2032 button battery. Great to use with all of your Arduino® projects that require the use of the date and time such as clocks, data-loggers and timers.

- Using a 24C32 32k EEPROM
- Supplied with a CR2032 battery
- Read and write functionality
- Usage time approx. 1 year fully charged
- Dimensions: 28(L) x 28(W) x 7(H)mm

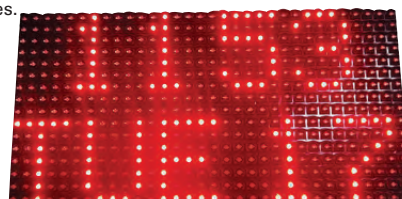


duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4450	\$5.95	\$5.35	\$4.75

## Make Your Own: Matrix Multi Clock With Arduino®

A very cool and useful talking point for your wall, work desk or bedside table. Personalise and change the clock mode to suite your mood or program your own fun message. Code includes six different styles.



*Finished Project*

See step-by-step instructions at:  
[jaycar.com.au/diy-arduino-clock](http://jaycar.com.au/diy-arduino-clock)

## For Microcontrollers Magnetic Hall Effect:

You'd be surprised at how useful a magnetic sensor can be, especially if you want to sense something without touching it. The duinotech range of magnetic sensors spans simple proximity sensors to detect the presence of a magnet to three dimensional compass sensors for detecting magnetic field directions and strength.

### HALL EFFECT SENSOR MODULE

Sense magnetic presence, rotating wheels and magnets, door sensors and any other magnets near this device.

- Output turns on at 30Gauss(3mT) and off at 10Gauss(1mT)
- Operating Voltage: 4.5 - 28VDC
- Schmitt-Trigger output
- Dimensions: 20(W) x 15(L) x 3(H)mm



duinotech

CAT.	Qty 1+	Qty 5+
XC-4434	\$4.95	\$4.45

### HALL EFFECT SENSOR UGN3503U HALL EFFECT SENSOR IC

A miniature sensor to accurately track extremely small changes in magnetic flux density - changes generally too small to operate Hall effect switches. Applications include notch sensor, current monitor, gear tooth sensor, etc.

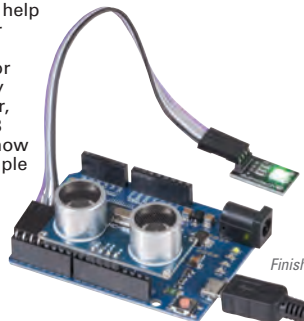
SPECIFICATIONS	ZD-1902
Operating Voltage	4.5 - 6VDC
Supply Current	Typ. 9mA
Output Voltage	Typ. 2.5V DC
Output Resistance	50Ω
Size	4.5(W) x 4.5(H) x 1.5(D)mm



CAT.	Qty 1+	Qty 10+	Qty 25+
UGN3503U	ZD-1902	\$7.75	\$6.90 \$6.15

## Make Your Own: Ultrasonic Parking Assistant With Arduino®

Here is a great project to help you park your car in your garage. It simply uses an ultrasonic distance sensor to measure how far away the car is from the sensor, and then light up an RGB LED module to let you know how close you are. A simple job perfectly suited to an Arduino® project.



Finished Project

See step-by-step instructions at:  
[www.jaycar.com.au/ultrasonic-parking-assistant](http://www.jaycar.com.au/ultrasonic-parking-assistant)

## For Microcontrollers LED & Laser:

Sometimes when you need to provide output from a project, a full-on display is too much, or takes up too much space. The modules below are great if you want to show what's going on with a simple 'GREEN IS OK' type of indication. If you want to shine some light and a basic LED is not enough, look at the higher powered XC-4468 LED or XC-4490 Laser modules.

### RGB LED MODULE

Using a 5050 RGB LED, by adjusting a PWM signal on the three primary colours the user can gain the full colour spectrum. This tiny module can be interfaced with a variety of microcontrollers.

- 3.3V to 5V operation
- 4 pin header
- Common ground LED
- Dimensions: 25(L) x 15(W) x 2(H)mm



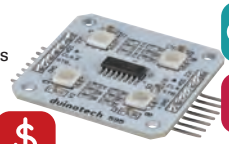
duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4428	\$4.95	\$4.45	\$3.95

### 4 X RGB LEDS MODULE

Display a full range of colours with this RGB LED module. The 4 x SMD 5050 LEDs onboard are super bright and controlled by the 74HC595 chip.

- 5VDC operation
- Colours: RGB
- Dimensions: 48(L) x 38(W) x 5(H)mm



duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4466	\$9.95	\$8.95	\$7.95

### 3W LED MODULE

A high brightness LED in an easy to use modular package. Includes a PWM input for brightness control.

- Operating Voltage: 5VDC
- Power Consumption: 3W
- Light Output: 200 Lumens
- Colour Temperature: 6000K
- Dimensions: 30(L) x 23(W) x 6(H)mm



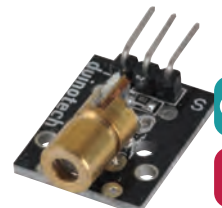
duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4468	\$10.95	\$9.85	\$8.75

### RED LASER DIODE MODULE

Need a red laser light for your latest project? Here it is! Everything you need to drive the laser diode is included on the board. Just connect it to 5VDC and you're good to go! Use it with our light sensor module XC-4446 to make a laser tripwire.

- Operating Voltage: 5VDC
- Output power: <1mW
- Wavelength: 650nm(Red)
- Dimensions: 45(W) x 23(D) x 10(H)mm



duinotech

CAT.	Qty 1+	Qty 5+
XC-4490	\$4.95	\$4.45

## Smart Hardware Competition:

- CALVIN LE ROUX, SHOPS AT JAYCAR SILVERDALE

"So these little guys are getting spoilt, they have nature sound effects at day time and night time, temperature/ humidity sensors for all lights with timers on replays, mini cameras which will soon be installed, all runs off a smart system ( raspberry pi - mini computer), all can be remotely controlled/ monitored, there will be a touch screen on the side to control the 2 cages along with voice commands (Echo Alexia) for those lazy days :D Even have a vacuum ventilation system for the bottom cage which gets smelly poop smell out the window before it effects the room! Haha"



WINNER



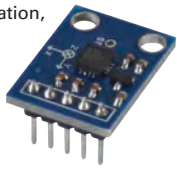
## For Microcontrollers Compass/Orientation/GPS:

We pretty much take for granted many of the sensors that are on our phones these days- compass, GPS, accelerometer, but did you know that you can also add similar features to your Arduino® projects? You could use a compass sensor to help guide your robot or an accelerometer to keep your Arduino® controlled gimbal facing upright, or even provide a tilt-based user input device for next project.

### 3-AXIS ACCELEROMETER MODULE

This module allows you to measure acceleration, detect impacts and determine orientation. Perfect for robotics projects.

- Protocol Analog: (1 Channel per axis)
- Measurement Range: +/-3g
- Operating Voltage: 3.3VDC - 5VDC
- Chipset: ADXL335
- Dimensions: 21(L) x 15(W) x 11(H)mm



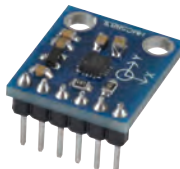
duinotech

CAT.	Qty 1+	Qty 5+
XC-4478	\$12.95	\$11.65

### 3 AXIS DIGITAL COMPASS MODULE

This module allows you to take accurate compass bearings, no matter how it is orientated. Easily interfaced via I²C.

- Operating Voltage: 5VDC
- Resolution: 12bits
- Interface: I²C
- Includes 5V - 3V level shifter
- Dimensions: 20(L) x 16(H) x 5(H)mm

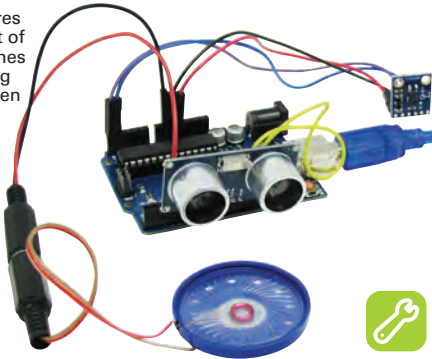


duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4496	\$15.95	\$13.95	\$12.45

## Make Your Own: Ultrasonic Distance Reader With Arduino®

This project measures the distance in front of the sensor, establishes the compass bearing and distance and then reads it out aloud - it's the sort of thing that could be used to help a visually impaired person navigate.



Finished Project

See step-by-step instructions at:  
[www.jaycar.com.au/diy-udcr](http://www.jaycar.com.au/diy-udcr)



### ARDUINO® COMPATIBLE GPS RECEIVER MODULE

A GPS receiver using the NEO6MV2 module, outputting NMEA data at 9600 baud. GPS is the simplest and most accurate way of determining position and speed, and this module gives excellent performance with a 50 channel receiver, 2m position accuracy and 0.1m/s speed accuracy (under good signal conditions).

- Ceramic antenna
- 4 Pin header for power and serial data
- 3.3V regulator on board
- Battery backed RAM



	CAT.	Qty 1+	Qty 4+	Qty 10
Arduino® Compatible GPS Receiver	XC-3712	\$49.95	\$44.95	\$39.95

## For Microcontrollers Obstacle Avoidance & Distance Detection:

What good is a robot if it can't gather information about its surroundings? This collection of modules is ideal to add to a robot or roving autonomous project. You could use an array of XC-4442 Ultrasonic Sensor Module to map out a robot's surrounding and have the Arduino® plan its next movement, or use the XC-4611 Triple Reflectance Module to sense the surface underneath your robot, or even create a space age musical instrument like the Ultrasonic Theremin.

### PIR MOTION DETECTOR MODULE

A pyroelectric infrared PIR motion sensor is a handy addition to any Arduino® project. Wide operating range and delay times changeable via two potentiometers giving this module versatility to the user, it is a must for any security application.

- Working voltage: 5-20VDC
- Quiescent current: 65uA
- Level output voltage: High 3V / Low 0V
- Delaying time 0.3-18s
- Dimensions: 32(L) x 24(W) x 25(H)mm



duinotech

CAT.	Qty 1+	Qty 5+
XC-4444	\$5.95	\$5.50

### DUAL ULTRASONIC SENSOR MODULE

The popular HC-SR04 ultrasonic distance module provides an easy way for your duinotech to measure distances up to 4.5m. Use it to add obstacle avoidance to your next robotics project or mount it on a servo to create your own ultrasonic SONAR!

- Uses just two digital pins
- Operating Voltage: 5V
- Sensor Angle: <15°
- Detection Distance: 20mm - 4.5m
- Dimensions: 45(W) x 20(D) x 13(H)mm



duinotech

CAT.	Qty 1+	Qty 5+
XC-4442	\$7.95	\$7.15

### TRIPLE REFLECTANCE SENSOR MODULE

Create a smarter line-following robot with the Triple Infrared Reflectance Sensor Module. The module has three evenly spaced sensors and mounting holes.

- CTRT5000 Sensor IC
- 5V Supply required
- Only 2 pins needed for power and 3 for outputs
- Dimensions: 69 x 32 x 8mm



duinotech

CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4611	\$8.95	\$8.05	\$7.15

### LINE TRACE SENSOR MODULE

This module measures the reflectivity of a surface with an infrared emitter/detector pair. The output goes to high whenever the reflectivity exceeds the threshold value, which can be adjusted with the onboard potentiometer.

- Output electrical level signal: Active Low
- VCC/OUT/GND pin connector
- Power Supply: 2.5-12V
- Working current: 18-20mA at 5V



duinotech

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4474	\$4.95	\$4.45	\$3.95

### INFRARED OBSTACLE AVOIDANCE SENSOR MODULE

This module is an inexpensive solution for an obstacle avoidance sensor, perfect for robotic projects and very easy to interface directly with Arduino® and compatible boards. It also works with our pcDuino module by using the 3.3V output. The module has two potentiometers one to control frequency and the other to control the intensity.

- 5VDC operation
- Adjustable frequency and intensity
- 4 pin header
- Dimensions: 42(L) x 27(W) x 18(H)mm



duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4524	\$7.95	\$7.15	\$6.35



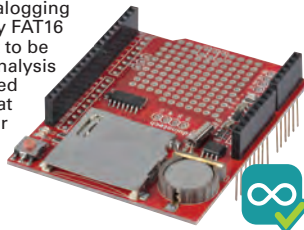
## For Microcontrollers Data Storage:

An Arduino® has a fairly limited amount of storage (certainly compared to the terabytes of data that can be stored on some hard drives), so the shields and modules below can be used to provide an extra place to log data or store resources for your sketch. You might even use one of them to write to a removable card to make it easy to get data to and from a computer.

### DATA LOGGING SHIELD

Extremely easy to set up. Use this datalogging shield to store your data to files on any FAT16 or FAT32 formatted SD card, or have it to be read by any plotting, spreadsheet or analysis program. All data stored is timestamped in real-time so you know precisely what happened when! Uses a 3.3V converter to avoid damaging your SD card. Includes a 3V button battery.

- Stackable headers
- Reset button
- Changeable CR1220 battery
- 102 solder pads
- Dimensions: 43(L) x 17(W) x 9(H)mm



duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4536	\$19.95	\$17.95	\$15.95

### SD CARD INTERFACE MODULE

Features 5V and 3.3V power inputs and resistors to allow safe on either IO voltage.

- Push-pull style SD Card Socket
- Works with inbuilt Arduino® Libraries
- 52mm x 31mm x 12mm



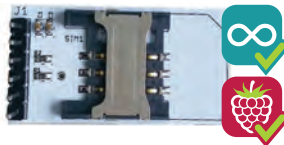
duinotech

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4386	\$9.95	\$8.95	\$7.95

### SIM CARD BREAKOUT BOARD

This is a full 8-pin breakout for the SIM socket allowing direct access to SIM communication. Features a Lock and Open switch.

*Not available in all stores but can be ordered.*



duinotech

CAT.	Qty 1+
XC-4596	\$14.95

## Make Your Own: Christmas Countdown Clock



This fun to build clock displays the time and date, and most importantly the number of days until Christmas. When the sound module is triggered, a voice (it might be Santa) announces the number of days and weeks until Christmas followed by a Christmas greeting, keeping everyone entertained. There is some soldering and careful assembly required to complete this project.

Finished Project

See step-by-step instructions at:  
[jaycar.com.au/christmas-clock](http://jaycar.com.au/christmas-clock)

### MICRO SD CARD SHIELD FOR WIFI MINI

Add gigabytes of storage to your XC-3802 WiFi Mini Main Board with this tiny shield and a Micro SD card. If you are using the XC3802 WiFi Mini Main Board as a WebServer or even for datalogging, you're probably going to need more storage space, and this shield lets you use cheap Micro SD cards with the easy-to-use Arduino® SD library.

- CS on D8
- Stackable Headers pre-soldered to allow more shields to be added
- Works with Arduino's inbuilt SD library
- 3.3V compatible only



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-3852	\$9.95	\$8.95	\$7.95

## For Microcontrollers Temperature/Environment:

There's no shortage of Arduino® weather station projects online, and with the duinotech range of sensor modules, you can create your own fully featured version. Alternatively, if you just want to check if the plants need watering or know if the sun is shining or how hot it is outside, we've got you covered with the range here.

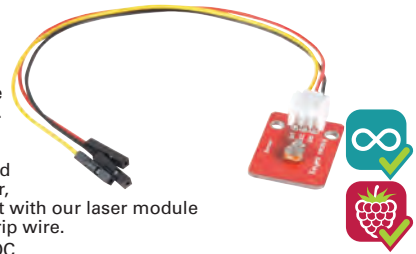
### PHOTOSENSITIVE LDR MODULE

Measure light levels with this sensor module.

This module uses a light dependant resistor to produce an output voltage that varies with light level.

Connect it straight into your duinotech or other Arduino® compatible board to build a night/day sensor, a sun tracker or combine it with our laser module XC-4490 to make a laser trip wire.

- Operating voltage: 3-5VDC
- Includes breakout cable
- Dimensions: 29(W) x 22(D) x 10(H)mm



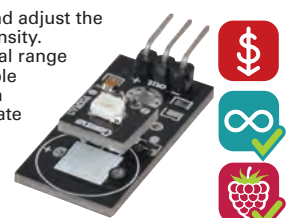
duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4446	\$5.95	\$5.35	\$4.75

### ULTRAVIOLET SENSOR MODULE

This module will measure the UV light and adjust the output voltage depending on the UV intensity. Capable of measuring over a wide spectral range of 200nm-370nm, this module is a valuable addition for weather station projects or in any place which require stable and accurate measurement of UV light.

- Working Voltage 3-5V DC
- Output voltage 0-1200mV
- Current 0.06-0.1mA
- Response wavelength 200-370nm
- Working temperature: -20 to 85°C
- Dimensions: 43(L) x 13(W) x 8(H)mm



duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4518	\$29.95	\$26.95	\$23.95

### ARDUINO® COMPATIBLE COLOUR SENSOR MODULE

One of the Arduino® projects that everyone should try is the coloured lolly sorter, and you can't build one of these without a colour sensor. The Colour Sensor Module can give individual greyscale, red, green and blue colour levels with just three IO pins, and features bright white LEDs for even illumination.

- Mounting holes for easy project building
- Can be set to read red, green, blue or greyscale levels
- Very fast response times with PWM output
- Optimal detection distance 1cm



	CAT.	Qty 1+	Qty 4+	Qty 10
Arduino® Compatible Colour Sensor	XC-3708	\$19.95	\$17.95	\$15.95

See page 324 for SD Cards.



## TEMPERATURE / ENVIRONMENT (CONTINUED)

### NON-CONTACT IR SENSOR MODULE

If you've ever wanted to add non-contact temperature sensing to an Arduino® project, here is the module. Accurate to half a degree in ambient conditions, it offers a ±40 degree field of view. Create a thermal image scanner with a couple of servos and a PTZ mechanism (YM-2758 and XC-4618), or use it for person tracking and detection.

- I<sup>2</sup>C interface
- Arduino® libraries available (search for MLX90614)
- Tiny module size

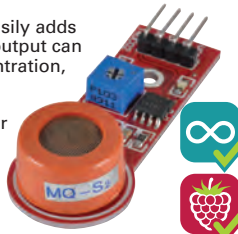


	CAT.	Qty 1+	Qty 4+	Qty 10
Non-contact IR Sensor Module	XC-3704	\$29.95	\$26.95	\$23.95

### ALCOHOL SENSOR MODULE

Using a MQ series gas sensor, this module easily adds alcohol detection to your project. An analog output can be used to monitor changes in alcohol concentration, while a digital output is triggered when the concentration exceeds a pre set threshold. Build your own breathalyser or automate your home-brewing.

- Twin Analog and Digital Outputs
- Adjustable sensitivity
- Operating voltage: 5VDC
- Dimensions: 50(L) x 20(W) x 13(H)mm

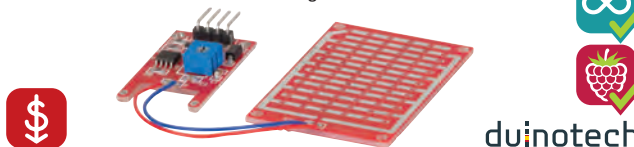


	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4540	\$9.95	\$8.75	\$7.75

### RAIN SENSOR MODULE

Add another dimension to your Arduino® weather project. This compact module can be used to detect rain, and can be separated into a sensor and control board to keep the important bits dry.

- 5V supply needed.
- Adjustable sensitivity
- LED indicator
- TTL level output can drive 100mA, enough for a small relay or buzzer
- Sensor: 50 x 35 x 1mm
- Control: 47 x 26 x 6mm - Wire Length: 75mm

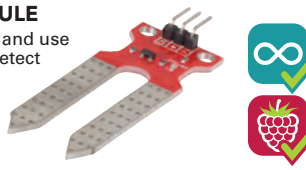


	CAT.	Qty 1+	Qty 5+	Qty 10+
	XC-4603	\$7.95	\$7.15	\$6.35

### SOIL MOISTURE SENSOR MODULE

Automate your garden with Arduino® and use the Soil Moisture Sensor Module to detect when your plants need watering.

- Analog output
- Works on 3.3V or 5V
- Current less than 20mA
- Dimensions: 62 x 20 x 7mm

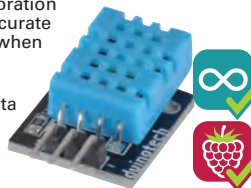


	CAT.	Qty 1+	Qty 5+	Qty 10+
	XC-4604	\$4.95	\$4.45	\$3.95

### DHT11 DIGITAL TEMPERATURE & HUMIDITY SENSOR

Measure both temperature and humidity with this nifty module. Full digital operation so no analog to digital calibration is required. Faster than XC-4432, but less accurate and with a smaller temperature range. Use when expecting rapid changes in temperature.

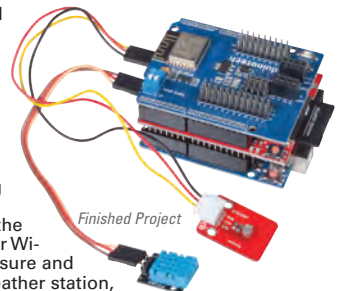
- Arduino® library available.
- Protocol: 1-Wire (Not Dallas 1-Wire, one data pin is required per sensor used)
- Operating Voltage: 3-5VDC
- Temperature Range: 0 °C - 50 °C +/- 2 °C
- Humidity Range: 20 - 80% +/- 5%
- Sample Rate: 1Hz
- Dimensions: 52(W) x 20(L) x 13(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4520	\$9.95	\$8.75	\$7.75

## Make Your Own: Wi-Fi Environmental Datalogger

Another handy Arduino® based tool to add to your workbench. The Environmental Datalogger measures temperature, humidity and light levels and logs it to an SD card with the time of the reading. The data is saved as a .csv file, opening straight into an Excel spreadsheet, for easy graphing and analysis. It also hosts a minimal web-server, allowing the log files to be downloaded over Wi-Fi. You can customise it to measure and log other data, turn it into a weather station, see how your homebrew beverage is going (how we use it), or add GPS to create a tracker. No doubt, you agree, it's a really handy project!

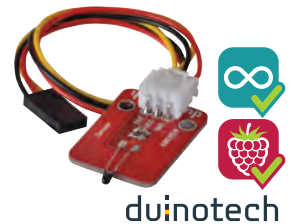


See step-by-step instructions at:  
[jaycar.com.au/wifi-datalogger](http://jaycar.com.au/wifi-datalogger)

### TEMPERATURE SENSOR MODULE

This module provides a simple way to measure temperature. The module outputs an analog voltage that varies directly with temperature. Connect it straight to one of your duinotech analog inputs.

- Operating voltage: 5VDC
- 210mm breakout cable included
- Dimensions: 33(W) x 22(D) x 9(H)mm

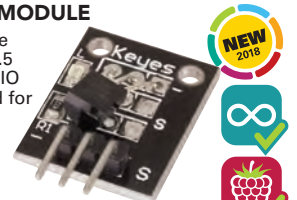


	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-4494	\$5.95	\$5.35	\$4.75

### DIGITAL TEMPERATURE SENSOR MODULE

The DS18B20 Digital temperature Module provides up to 12bits of resolution and 0.5 degree accuracy through a single digital IO pin with no external components needed for connection to a microcontroller. Multiple devices can even be connected to the same pin.

- Fully digital operation
- Conversion time less than 1 second
- Arduino® library (OneWire) available

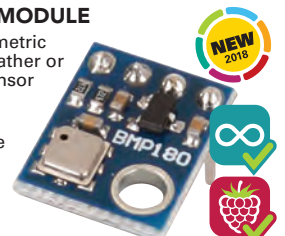


	CAT.	Qty 1+	Qty 4+	Qty 10
Digital Temperature Sensor	XC-3700	\$6.95	\$6.25	\$5.55

### BAROMETRIC PRESSURE SENSOR MODULE

There's heaps of different uses for a barometric sensor, such as using it to forecast the weather or measuring altitude. The Bosch BMP180 sensor also includes a temperature sensor, and is accessible via an I<sup>2</sup>C interface.

- 0.01hPa and 0.1 degree accuracy (altitude accuracy about 1m)
- Libraries available to given direct altitude readout (search for BMP180)
- Tiny module size

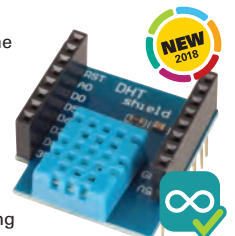


	CAT.	Qty 1+	Qty 4+	Qty 10
Barometric Pressure Sensor	XC-3702	\$19.95	\$17.95	\$15.95

### DHT 11 SHIELD FOR WIFI MINI

Create a tiny environmental sensor node with the XC-3802 WiFi Mini Main Board and this DHT11 based temperature and humidity sensor shield. Pre-soldered stackable headers allow the shield to be plugged straight into Wifi Mini Main board, and more boards to be added on top.

- Tiny sensor shield
- Uses pin D4 for DHT11 interface
- Arduino® libraries available
- Suitable to plug into breadboard for prototyping



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-3856	\$9.95	\$8.95	\$7.95



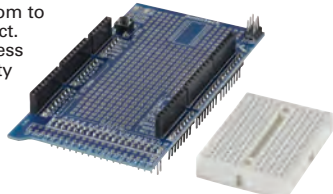
## For Microcontrollers Prototyping & Breakout:

The following parts are ideal for taking that design that you've squashed onto a breadboard, and making it into something more permanent. With prototyping space, you can solder individual components or even whole modules together to create a custom shield that is much more robust.

### PROTOTYPING SHIELD FOR DUINOTECH - MEGA

This shield gives you plenty of room to prototype your latest MEGA project. The stackable shield provides access to all of the MEGAs pins and plenty of solder pads to prototype on. A small solder-less breadboard is included for fast prototyping.

- Dimensions: 106(W) x 56(L) x 19(H)mm



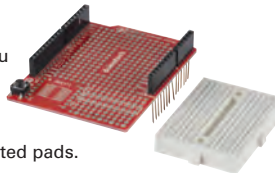
duinotech

CAT.	Qty 1+	Qty 5+
XC-4416	\$12.95	\$11.35

### PROTOTYPING SHIELD

This stackable shield makes semi-permanent prototyping simple. When you want something more permanent than a breadboard, but don't want to make your own PCB, this shield is the answer. Provides solder-pad access to all of the Arduino's pins, and a large area of isolated pads.

- Includes reset button
- SOIC-14 breakout, for surface mount ICs
- Dimensions: 68(L) x 53(W) x 10(H)mm



duinotech

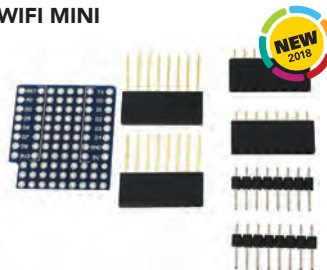
CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4482	\$15.95	\$14.35	\$12.75

### PROTOTYPING SHIELD FOR WIFI MINI

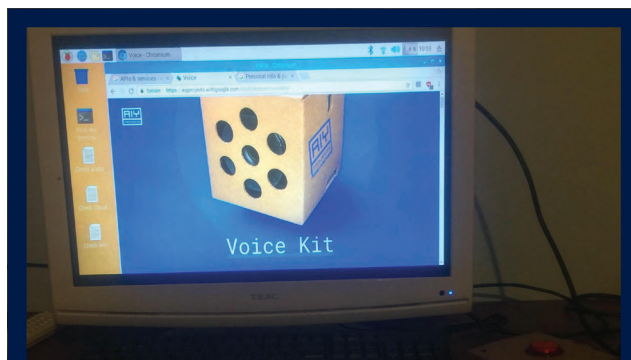
A prototyping shield to suit the XC-3802 WiFi Mini main board. Create custom hardware and add features to your project or build custom sensor nodes or output modules.

#### Includes:

- 1 x Protoboard
- 2 x Male Header Strip
- 2 x Female Header Strip
- 2 x Stackable Header Strip



	CAT.	Qty 1+	Qty 3+	Qty 6+
Prototyping Shield for WiFi Mini	XC-3850	\$4.95	\$4.45	\$3.95



## Smart Hardware Competition:

- ANDREW PULLIN, SHOPS AT JAYCAR ALBURY

"Who needs Cortana or a Google Assistant when you can build your own? I connected a Raspberry Pi HAT and can completely automate the house with it and voice control. Turn lights on or off and get today's weather. Play some music or water the lawn! Really Cool!"

## Make Your Own: Resistor & Capacitor Tester

If like us you're always having to sort through your junk drawer and have trouble with your colour codes, here's a handy project for you. This tester will try to work out whether you are connected to a resistor or a capacitor and then show you the relevant value. If it's a resistor, it'll also suggest the nearest resistor from the Jaycar 1/2W range. No more sorting through your draws blindly!



Finished Project



See step-by-step instructions at:  
[jaycar.com.au/rct](http://jaycar.com.au/rct)



### BREADBOARD LAYOUT PROTOTYPING BOARDS

A prototyping board that lets you transfer your breadboard design without having to rework it. Includes five holes on each side per row and power rails running the length of the board.

#### Two sizes to choose from:

##### SMALL:

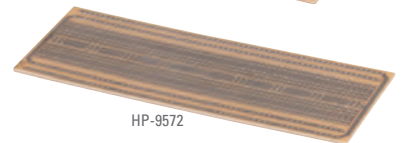
- 25 rows
- 400 holes
- Similar layout to PB-8820 Breadboard
- 73mm x 47mm x 1.4mm



HP-9570

##### LARGE:

- 59 rows
- 862 holes
- Similar layout to PB-8815 Breadboard
- 155mm x 58mm x 1.4mm



HP-9572

	CAT.	Qty 1+	Qty 4+	Qty 10+
400 hole	HP-9570	\$4.95	\$4.45	\$3.95
862 hole	HP-9572	\$9.95	\$8.95	\$7.95

## Tech Talk: About Scratch & S4A

Scratch is an easy to learn technology language designed by MIT Media Labs and is mainly intended to introduce programming to children aged 7 to 16. The Arduino® community have modified Scratch and created S4A. S4A allows for simple programming of the Arduino® open source hardware platform. It provides new blocks for managing sensors and actuators connected to Arduino®. Arduino® objects offer blocks for the basic microcontroller functionalities, analogue and digital writes and reads, and also for higher level ones. In S4A, an Arduino® board is represented by a special kind of sprite. The Arduino® sprite will automatically find the USB port where the board is connected. It is possible to connect to multiple boards at the same time by just adding a new Arduino® sprite.

Components have to be connected in a particular way. S4A allows for 6 analog inputs (analog pins), 2 digital inputs (digital pins 2 and 3), 3 analogue outputs (digital pins 5, 6 and 9), 3 digital outputs (pins 10, 11 and 13) and 4 special outputs to connect Parallax continuous rotation servomotors (digital pins 4, 7, 8 and 12). A board can be managed wirelessly by attaching an RF module to it, such as Xbee. S4A allows control of many boards as USB ports that are available. S4A is backwards compatible with Scratch, so you can open Scratch projects in it.

However, you won't be able to share your projects on the Scratch community website because doing so goes against the Scratch terms of use.





## For Microcontrollers Programming, Uploading & Custom:

If you feel like there isn't quite an Arduino® main board or module that suits what you're trying to build, or your stack of shields is just too big, the parts below can help you make the next step towards custom building your own board. The various programmers will also allow you to explore the world beyond what the default Arduino® IDE and bootloaders offers. Did you know you can even use the XC-4664 USB to Serial Adaptor to program the XC-4614 Wi-Fi Shield as though it was a stand-alone Arduino® board?

### FT232 USB TO SERIAL BREAKOUT BOARD

This is a basic breakout board for the FTDI FT232RL USB to serial IC. The pinout of this board matches the FTDI cable to work with 5V Arduino® boards. It can also be used for general serial applications. The major feature of this board is that it brings out the DTR pin as opposed to the RTS pin of the FTDI cable. The DTR pin allows an Arduino® target to auto-reset when a new Sketch is downloaded. This is a really nice feature to have and allows a sketch to be downloaded without having to hit the reset button.

*Not available in all stores but can be ordered.*



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CAT.	Qty 1+
XC-4594	\$26.95

### AVR ISP 10 PIN TO 6 PIN ADAPTOR

Adaptor from 10pin ISP header to 6 pin ISP header as found on Arduino® boards.

- Use with an ISP programmer to update bootloaders or reflash bricked boards
- 10 pin plug to 6 pin socket



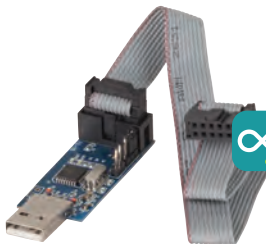
duinotech

CAT.	Qty 1+	Qty 5+	Qty 10+
XC-4613	\$4.95	\$4.45	\$3.95

### ISP PROGRAMMER FOR AVR

Compatible with Arduino® boards with ISP, ZZ-8727 ATmega328P MCU and fully supported by the Arduino® IDE, allowing you to unbrick, install or update Arduino®-compatible boards and your own custom-made projects.

- Compatible with a wide range of microcontrollers, including all Duinotech main boards
- 10 pin ISP programming cable included (use XC-4613 to convert to 6 pin)



duinotech

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4627	\$14.95	\$13.45	\$11.95



Shop online for your Jaycar Electronics products and check out our latest products and promotions on our website.

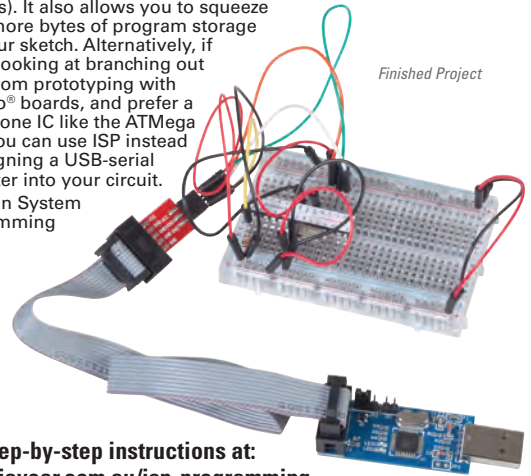
Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)

## Make Your Own: ISP\* Programmer With Arduino®



A handy tool to have in your Arduino® Kit. Aside from giving you a faster way of programming your Arduino® Boards, an ISP programmer can also be used to reprogram a faulty bootloader or even install a new bootloader (with new features). It also allows you to squeeze a few more bytes of program storage into your sketch. Alternatively, if you're looking at branching out away from prototyping with Arduino® boards, and prefer a standalone IC like the ATmega328P, you can use ISP instead of designing a USB-serial converter into your circuit.

\*ISP = In System Programming



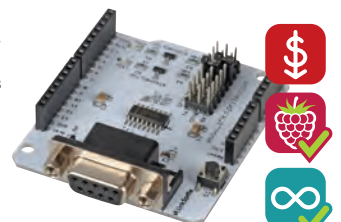
Finished Project

See step-by-step instructions at:  
[www.jaycar.com.au/isp-programming](http://www.jaycar.com.au/isp-programming)

### RS-232 SHIELD

This shield allows you to connect a legacy device (or computer) to your existing Arduino® board. Providing a full RS-232 port, this shield allows you to directly communicate with a huge variety of serial peripherals. You can use the default hardware Serial on pins 0 & 1, or use the software-Serial library on pins 2-7.

- MAX232 Chipset
- DB9 Female Socket
- RS-232 Voltage compliant
- Dimensions: 65(L) x 54(W) x 16(H)mm



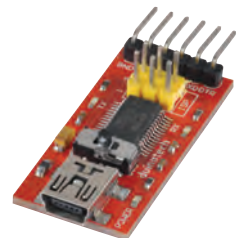
duinotech

CAT.	Qty 1+
XC-4227	\$24.95

### FTDI USB TO SERIAL MODULE

A mini-USB to 6-pin serial port module used to communicate with Arduino® boards and modules. It uses the original FT232 chip with power/sending/receiving indicator and also a selectable 3.3V and 5V power option to suit different boards.

- 3.3V & 5VDC power switch
- Send & receive indicators
- Dimensions: 43(L) x 17(W) x 12(H)mm



duinotech

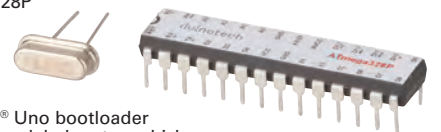
CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4464	\$19.95	\$17.95	\$15.95

### ATMEGA328P MCU IC WITH ARDUINO® UNO BOOTLOADER & 16MHZ CRYSTAL

An Atmel AVR ATmega328P microcontroller for you to build your very own customised Arduino® compatible projects.

For your convenience it comes with the Arduino® Uno bootloader preinstalled and features a label on top which details the pinouts. Includes 16MHz crystal oscillator.

- Same IO pins as Duinotech Uno Board
- 0 - 4MHz @ 1.8 - 5.5V, 0 - 10MHz @ 2.7 - 5.5V, 0 - 20MHz @ 4.5 - 5.5V
- 28-pin DIP format for easy use in breadboards or Arduino® compatible boards



See page 41 for pin out



duinotech

CAT.	Qty 1+	Qty 10+	Qty 25+
ZZ-8727	\$12.95	\$11.65	\$9.05

## For Microcontrollers

## Linker Modules & Accessories:

The Linker range is based around a series of Arduino® compatible modules, shields and cables that make prototyping easy - so easy that we'd recommend that even primary school children would be able to use them. With the Ardublocks Arduino® IDE add-on, even programming becomes as simple as drag and drop.

The Linker Base Shield attaches to the Uno, Mega or Leonardo boards, and allows any of the Linker modules to be plugged in. No need to worry about getting connections reversed and blowing up components - they can only be plugged in one way. There's over twenty different modules in the Linker range, and because the Linker Base Shield has standard Arduino® headers, you can even add any of our duinotech modules if you need to go beyond what Linker can offer.

### LINKER ESSENTIALS

#### LINKER BASE SHIELD FOR ARDUINO®

This is the base shield of Linker kit, it allows simple and tidy connection between all Linker sensors/ modules and Arduino®/pcDuino. Linker kit is more suitable for starters than breadboard or protoboard. You simply connect the Linker input/output modules to your Arduino®/pcDuino projects with clearly marked 2.54mm headers instead of I/O pins.

- Connections: 1 x SPI, 2 x IIC, 1 x UART
- Dimensions: 69(W) x 59(H) x 18(D)mm

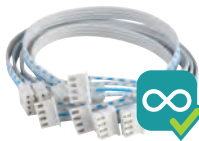


	CAT.	Qty 1+	Qty 5+
	XC-4557	\$24.95	\$22.45

#### LINKER JUMPER LEADS FOR ARDUINO®

Connects Linker kit sensors/modules and Linker kit base shield. 2.54mm headers for easy and tidy connection.

- 4 pins, 2.54mm spaced
- Sold individually



	CAT.	Qty 1+	Qty 5+
200mm	Each	XC-4558	\$4.95
500mm	Each	XC-4559	\$4.95
1000mm	Each	XC-4560	\$4.95

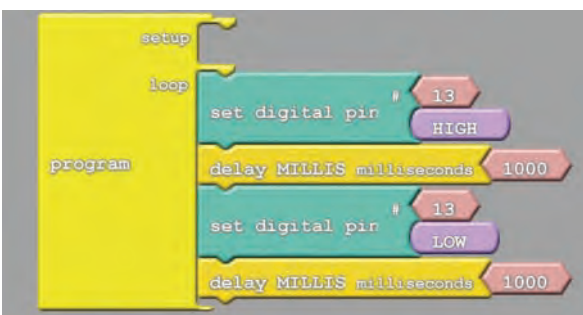
## Tech Talk: Programming Made Easy With Ardublock

If you are just starting out or just can't get your head around programming your Arduino® project then ArduBlock makes it easy. ArduBlock is a graphical drag-and-drop type programming environment for Arduino®. It's also ideal for kids!

By dragging and dropping colour coded blocks into the workspace, a fully functioning Arduino® program can be created within minutes. But just because ArduBlock is easy doesn't mean it's not powerful. You have access to most Arduino® IDE functions and a few libraries as well. And to help you make the transition to the full Arduino® IDE, ArduBlock also turns your blocks into standard Arduino® code as well. Brilliant!

To learn more about ArduBlock visit [www.jaycar.com.au/ardublock](http://www.jaycar.com.au/ardublock)

The diagram shows you how simple it is to program the classic Arduino® 'Blink' program using ArduBlock.



This product is compatible with Raspberry Pi



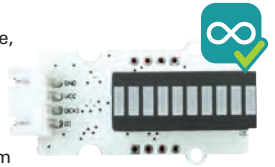
This product is compatible with Arduino®

### LINKER MODULES

#### LINKER LED BAR FOR ARDUINO®

This LED bar is a standard Linker kit module, so it can connect to Arduino® or pcDuino easily via the base shield. The LED bar has 10 light gauges to use as an indicator for various measurements.

- Driver Chip: MY9221
- Dimensions: 44.1(W) x 24.2(H) x 11.5(D)mm

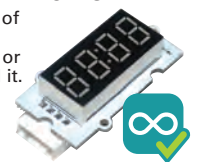


	CAT.	Qty 1+	Qty 5+
10 Segments	XC-4568	\$9.95	\$8.75

#### LINKER 4-DIGIT 7-SEGMENT MODULE FOR ARDUINO®

This Linker 4-digit 7-segment module uses a chipset of TM1637 to drive a 12-pin 4-digit command anode 7-segment LED. It is an ideal module to use as timer or clock. The MCU only needs two GPIO lines to control it.

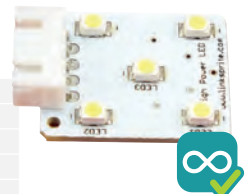
- Dimensions: 46.2(W) x 24.3(H) x 14.5(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
4-Digit 7-Segment	XC-4569	\$11.95	\$10.70	\$9.50

#### LINKER HIGH POWER LED MODULE FOR ARDUINO®

This is a high power LED module for the Linker kit. It has five very bright white LEDs to use as lamp or camera flash.



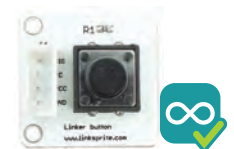
SPECIFICATIONS	XC-4570
LEDs	SMD 3528
Working Voltage	3.0-3.4V
Operating Current	20mA
Dimensions	28.9(W) x 20(H) x 9.5(D)mm

	CAT.	Qty 1+	Qty 5+
5 LED	XC-4570	\$14.95	\$13.45

#### LINKER MOMENTARY PUSH BUTTON SWITCH FOR ARDUINO®

A standard 12mm square momentary button mounted for the Linker connection. The button is big and has a solid tactile click for assurance. Can be used as an input or as a reset button.

- Dimensions: 26(W) x 25(H) x 10.9(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
6V 40mA	XC-4571	\$4.95	\$4.45	\$3.90

#### LINKER LEDS FOR ARDUINO®

Linker LED Module is designed for beginners of Arduino®/ pcDuino to monitor controls from digital ports. It can be mounted to your project easily and used as pilot lamp for power or signal. Its brightness can be adjusted by potentiometer.

##### LINKER 3mm MODULES

Available in three colours green, red and yellow (purchased separately)

- LED Size: 3mm
- Dimensions: 23(W) x 24.2(H) x 9.5(D)mm



XC-4561

##### LINKER 10mm MODULES

Available in four colours blue, green, red and yellow (purchased separately)

- LED Size: 10mm
- Dimensions: 20.4(W) x 24.2(H) x 21(D)mm



XC-4564

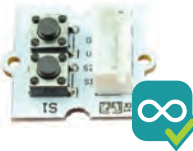
COLOUR	SIZE	CAT.	Qty 1+	Qty 5+
Green	3mm	XC-4561	\$5.95	\$5.35
Red	3mm	XC-4562	\$5.95	\$5.35
Yellow	3mm	XC-4563	\$5.95	\$5.35
Blue	10mm	XC-4564	\$5.95	\$5.35
Green	10mm	XC-4565	\$5.95	\$5.35
Red	10mm	XC-4566	\$5.95	\$5.35
Yellow	10mm	XC-4567	\$5.95	\$5.35



## LINKER MODULES (CONTINUED)

### LINKER DOUBLE BUTTON MODULE FOR ARDUINO®

Two momentary push buttons mounted on a single board for Arduino®/pcDuino via the Linker connection. Can be used as a pair of reset and switch buttons. 25(H) x 21(W) x 11(D)mm.

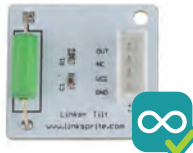


CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4573	\$4.95	\$4.45	\$3.90

### LINKER TILT MODULE FOR ARDUINO®

The LinkerTilt Module is the equivalent of a button, and is used as a digital input. Inside the tilt switch is a pair of balls that make contact with the pins when the case is upright. Tilt the case over and the balls don't touch, thus not making a connection. It is wired to the SIG line, NC is not used on this kit.

- Dimensions: 28(L) x 26(W) x 11(D)mm

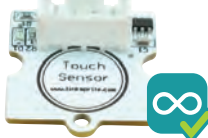


CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4575	\$4.95	\$4.45	\$3.90

### LINKER TOUCH SENSOR FOR ARDUINO®

A capacitive touch sensor to replace a push button. Low in power consumption, fast response and easy to operate. Voltage reads 0V when idle, changes to 5V when touched.

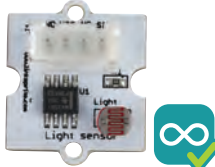
- Dimensions: 28(W) x 24(H) x 8(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4572	\$10.95	\$9.85	\$8.75

### LINKER LIGHT SENSOR FOR ARDUINO®

The light sensor, also known as the light dependent resistor (LDR). Typically, the resistance of the light sensor will decrease when the ambient light intensity increases.



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4574	\$6.95	\$6.25	\$5.55

### LINKER TEMPERATURE MODULE FOR ARDUINO®

The Linker Temperature Module uses a thermistor to detect the ambient temperature. The resistance of a thermistor will increase when the ambient temperature decreases. It's this characteristic that we use to calculate the ambient temperature.

- Dimensions: 20(L) x 20(W) x 11(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4576	\$6.95	\$6.25	\$5.55

### LINKER HALL SENSOR FOR ARDUINO®

This hall module hosts a magnetic hall sensor that senses the presence of magnetic field. If there is a magnetic field present, it will report a high level signal.

- Dimensions: 20(L) x 24(W) x 11(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4577	\$14.95	\$13.35	\$11.70

### LINKER ROTARY POTENTIOMETER MODULE FOR ARDUINO®

The Linker Rotary Potentiometer Module produces analog output between 0 and Vcc (5V DC with Arduino®) on its D1 connector. The D2 connector is not used. The angular range is 300 degrees with a linear change in value. The resistance value is 10k, perfect for Arduino® use.

- Dimensions: 25(L) x 25(W) x 19(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4578	\$6.95	\$6.25	\$5.55

### LINKER LINEAR/SLIDE POTENTIOMETER MODULE FOR ARDUINO®

The slide potentiometer is a linear variable resistor with a total resistance of 10k. When you move the lever from one side to the other, its output voltage will range from 0V to the VCC you apply. It has four pins, 3 of which are connected to VCC, GND and the ADC IN on the slide, while the remaining pin is connected to a red indicator LED. You can use the indicator LED to visually display the change on the potentiometer.

- Dimensions: 60(L) x 24(W) x 20(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4579	\$15.95	\$14.35	\$12.75

### LINKER BUZZER MODULE FOR ARDUINO®

This buzzer module will generate around the audible 2kHz range.

- Dimensions: 25(L) x 25(W) x 11(D)mm

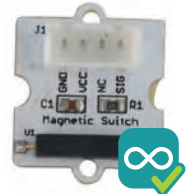


CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4580	\$5.95	\$5.35	\$4.75

### LINKER MAGNETIC SWITCH MODULE FOR ARDUINO®

This is a magnetic switch module with Linker kit standard connection. It is based on encapsulated dry reed switch of single-pole, single throw (SPST) type, having normally open ruthenium contacts. The sensor is a double-ended type and may be actuated with an electromagnet, a permanent magnet or a combination of both. The magnetic switch is a wonderful tool for designers who would like to turn a circuit on and off based on proximity.

- Dimensions: 20(L) x 24(W) x 11(D)mm



CAT.	Qty 1+	Qty 3+
XC-4581	\$9.95	\$8.75

### LINKER SOUND SENSOR FOR ARDUINO®

This is a simple microphone. Based on the power amplifier LM386 and the electret microphone, it can be used to detect the sound strength of the environment. The value of output can be adjusted by a potentiometer.

- Dimensions: 42(W) x 24(L) x 11(D)mm

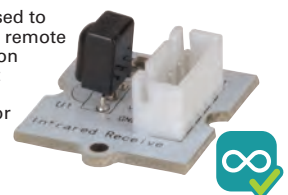


CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4582	\$14.95	\$13.35	\$11.70

### LINKER INFRARED RECEIVER MODULE FOR ARDUINO®

The Linker Infrared Receiver Module is used to receive infrared signals and also used for remote control detection. There is an IR detector on the Infrared Receiver which is used to get the infrared light emitted by the Infrared Emitter. The IR detector has a demodulator inside that looks for modulated IR at 38KHz. The Infrared Receiver can receive signals well within 10 metres.

- Dimensions: 21(W) x 25(L) x 12(D)mm



CAT.	Qty 1+	Qty 3+
XC-4583	\$9.95	\$8.75

### LINKER RTC FOR ARDUINO®

The Linker RTC module is based on the clock chip DS1307, which supports the I<sup>2</sup>C protocol. It utilises a Lithium cell battery (CR1225). The clock/calendar provides seconds, minutes, hours, day, date, month, and year. The end of the month date is automatically adjusted for months with fewer than 31 days, including corrections for leap years. The clock operates in either the 24-hour or 12-hour format with AM/PM indicator. And it is valid up to 2100. In order to gain a robust performance, you must put a 3V CR1225 lithium cell in the battery holder. If you use the primary power only, the module may not work normally, because the crystal may not oscillate.

- Dimensions: 42(L) x 24(W) x 11(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4584	\$19.95	\$17.70	\$15.70



## ▼ LINKER MODULES (CONTINUED)

### LINKER VIBRATION SENSOR MODULE FOR ARDUINO®

This vibration sensor module uses a spring based sensor. When there is vibration, it will output a digital signal. The SW-18010P series spring type used is a non-directional trigger switch. Switch is open circuit OFF-state when it is static, and when external force results in a corresponding vibration, or movement speed gathers enough centrifugal force, conductive pick feet will produce instant conductivity and circuit goes to On-state.



CAT.	Qty 1+	Qty 3+
XC-4587	\$9.95	\$8.75

### LINKER FLAME SENSOR MODULE FOR ARDUINO®

Flame sensor module of Linker kit is only sensitive to the light in the frequency band of infrared and ultraviolet. This breakout board has 3 useful pins: sensor output signal, power, and ground. The sensor output signal is an analog signal. In an indoor environment, the signal output is around 0V. When there is flame or other infrared source, the voltage of output signal will increase. When the intensity of light is high, it can output as large as 3V.



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4588	\$10.95	\$9.85	\$8.75

### LINKER PATH TRACKING SENSOR MODULE FOR ARDUINO®

This sensor module uses a reflective infrared sensor (tcr500). The infrared light is emitted and reflected back to the receiver, it's then inverted by 74LS14 and output to the output pin and the LED. The output signal is a digital signal. There are 3 active pins: output signal, power supply and ground. On a white surface, the output signal will be HIGH. On a black/non-reflective surface, the output signal will be low and the LED is off. The working distance from the sensor to the surface is around 15mm.



CAT.	Qty 1+	Qty 3+
XC-4590	\$9.95	\$8.75

## ▼ BENCH VOLTMETER

### ANALOGUE BENCH VOLTMETER 0-15V

A handy bench volt meter with analogue dial and banana plug connections. Reminiscent of the volt meters you might see in a school physics lab, this volt meter gives a quick and easy to read display of volts, and is ideal as a permanent fixture on a test bench, with a 15V maximum reading be suitable for automotive part testing.

- Choose either 3V and 15V scales via separate banana plugs
- 3V scale reads -1V to 3V
- 15V scale reads -5V to 15V
- Zero offset adjust
- Analogue movement
- Internal resistance: 3kΩ (3V scale), 12kΩ (15V scale)



CAT.	Qty 1+	Qty 3+	Qty 6+
QP-5040	\$19.95	\$17.95	\$15.95

### DIYODE MONTHLY MAGAZINE

Get your DIYODE magazine at Jaycar! DIYODE Magazine is a 100% Australian-made, independent publication produced monthly. The magazine's fundamental focus is to provide a valid platform to showcase the amazing creations and the hard work undertaken by the electronics and maker communities, to solve problems or to just make really awesome things! Jaycar gets its stock of DIYODE magazine straight off the printing press, so we usually have it a couple of days earlier than the newsagents. Don't forget to call into a Jaycar store for the latest issue hot off the press. For more information about the magazine visit: [www.diyodemag.com](http://www.diyodemag.com). But wait, there's more! Every print magazine purchase includes access to a FREE digital edition on the diyodemag.com website.



CAT.	Qty 1+
DIYODE Monthly Magazine	BE-5030 \$9.95

## ▼ BOOKS

### C PROGRAMMING FOR ARDUINO® BOOK

Technology is constantly changing. New microcontrollers become available every year. The one thing that has stayed the same is the C programming language used to program these microcontrollers. If you would like to learn this standard language to program microcontrollers, then this book is for you!



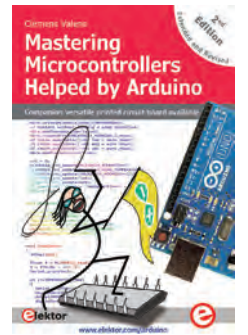
CAT.	Qty 1+
C Programming for Arduino® Book	BT-1388 \$69.95

### MASTERING MICROCONTROLLERS HELPED BY ARDUINO®

The aim of this book is not only to let you enter the World of Arduino®, but also to help you emerge victorious and continue your microcontroller programming learning experience by yourself. In this book theory is put into practice on an Arduino® board using the Arduino® programming environment. Having completed this fun and playful course, you will be able to program any microcontroller, tackling and mastering I/O, memory, interrupts, communication (serial, I²C, SPI, 1-wire, SMBus), A/D converter, and more. All programs presented can be downloaded for free from [www.elektor.com/mastering-microcontrollers](http://www.elektor.com/mastering-microcontrollers). For this second edition, the author has designed a versatile printed circuit board that can be stacked on an Arduino® board. The assembly can be used not only to try out many of the projects presented in this book but also allows for new exercises that in turn provide the opportunity to discover new techniques.

This book is for you if you are:

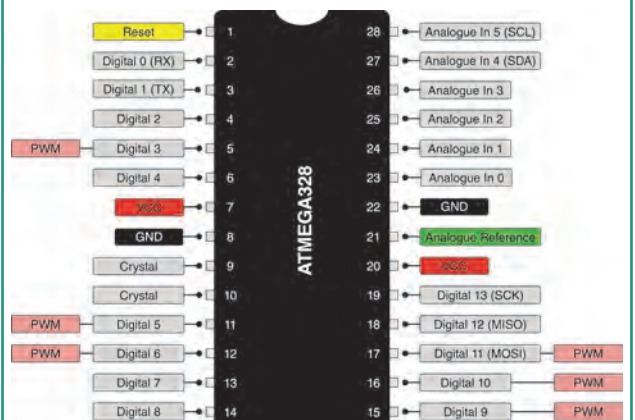
- A microcontroller novice
- An Arduino® user (enthusiast, artist, etc.) wishing to deepen your knowledge
- An electronics graduate or undergraduate student
- A teacher looking for inspiration
- Soft cover, 380 pages. 209(L) x 139(W)mm



CAT.	Qty 1+
BM-7144	\$79.95

## Tech Talk: Useful Pinouts

Below is the pinout diagram of the ATmega328 microcontroller IC, found on the popular Arduino® Uno board. You'll find this diagram handy if you're prototyping on some breadboard instead of using one of our pre-built modules. See our ATmega328P micro and crystal kit (ZZ-8727) shown below.



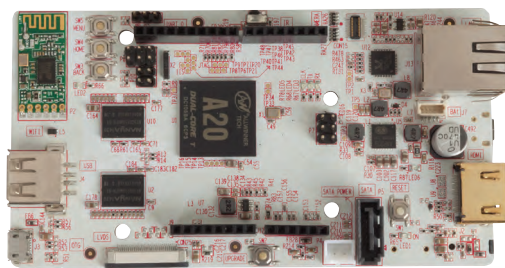
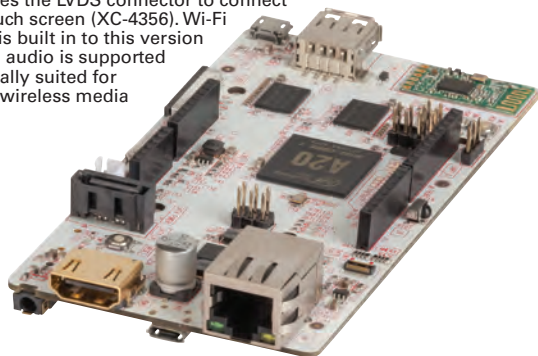
## pcDuino & Accessories:

pcDuino3 is a high performance, cost effective single board computer. It can be used for a wide range of applications; for example use the built-in HDMI port and pre-loaded XBMC-Media Centre to make your own home cinema media player. Add a HDD and a wireless keyboard & mouse (such as XC-4943) and you have a great media centre ready to go. Connect to the internet via Wi-Fi or 10/100/1000 Ethernet.

The Arduino® style header allows you to connect Arduino® shields\* described over the next 14 pages of the catalogue, so you can make anything your heart desires. Six Analog inputs and two PWM outputs make for even extra versatility.

### PCDUINO V3.0

The latest version of the pcDuino single-board computer. This is the full size pcDuino board and includes the LVDS connector to connect an LCD touch screen (XC-4356). Wi-Fi capability is built in to this version and digital audio is supported via I<sup>2</sup>S. Ideally suited for creating a wireless media center.



SPECIFICATIONS	XC-4350
CPU	AIWinner A20 SoC, 1GHz ARM Cortex A7 Dual Core
GPU	OpenGL ES2.0, OpenVG 1.1, Mali 400 Dual Core
DRAM	1GB
Storage	4GB Flash, microSD card (TF) slot for up to 32GB
Video	HDMI 1.4 with HDCP support
OS	Ubuntu 14.04, Android 4.2
Arduino® Interface	Arduino® sockets, same as Arduino® UNO 14 x GPIO, 2 x PWM, 6 x ADC, 1 x UART, 1 x SPI, 1 x I <sup>2</sup> C
Network Interface	Built-in WiFi, Ethernet 10M/100Mbps/1Gbps
Audio Out	3.5mm analog interface, I2S stereo digital interface
LCD	LVDS
IR	IR receiver
SATA	SATA Host socket
USB	1 x USB host, 1xUSB OTG
Power	5V, 2000mA
Dimensions	121(L) x 65(W)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
pcDuino V3.0 with Wi-Fi	XC-4350	\$89.95	\$80.95	\$71.95

There is no need to go through the tedious process of preparing a boot SD Card, the pcDuino has a 4GB onboard flash drive that comes preloaded with Ubuntu Linux (which you can replace with Android operating system).

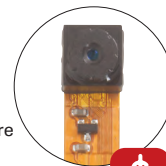
While you don't need an SD Card, there is a microSD socket available for extra storage. If you need some serious storage space, the pcDuino sports a SATA connector so you can attach a full size HDD.

Happy making!

*\*CAUTION: Unlike the Arduino®, the pcDuino operates at 3.3V not 5V. If you want to connect a shield with 5V logic, you must use a voltage step down shield (XC-4362). The Arduino® header on the pcDuino still supplies 5V to power your shields, but all inputs must be at or below 3.3VDC.*

### PCDUINO 5MP CAMERA

This 5M pixel camera module is capable of capturing 2592 x 1944 active array video and images and connects directly to your pcDuino V3. Connect the included ribbon cable to the CSI (Camera Serial Interface) port on your pcDuino, boot it up, and you are good to go! The real strength of this camera module comes from the OV5640 image sensor. The OV5640 is a high quality CMOS image sensor, for mobile phone camera and digital camera applications. The OV5640 incorporates a 2592 x 1944 active array, on-chip 10-bit ADC, and image signal processor. It outputs various data formats, such as RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422.



CAT.	Qty 1+
XC-4364	\$19.95

### SATA CABLE FOR PCDUINO

This SATA cable kit connects your pcDUINO3 to a hard drive or SSD. It is a simultaneous power and data line that enables you to operate your device simply and easily.

- Length: approx. 150mm

Note: Does not include hard drive or pcDuino.

See page 325 for our 1TB HDD



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-4366	\$4.95	\$4.45	\$3.95

### TERMS YOU MAY WANT TO KNOW:

#### XBMC:

All in one Media Centre - perfect for the car, or just for the TV at home.

#### Arduino® IDE:

Program and programmer all in one - plug in a keyboard and mouse, and watch your sketches work on the same machine you've developed them on.

#### SCRATCH:

Want to program but don't like the look of pages of dense code? Have a look at Scratch - drag and drop blocks to assemble code, and your programs can even interact with sound and animations.

#### CHROMIUM BROWSER:

A fully featured browser is available with just a click.

#### UBUNTU 14 APPS:

All your essential utility apps like media player, text editor, file manager, and calculator. Sample scripts: See how easy it is to control the output pins by a single click of icons on the desktop.

#### OCTOPRINT:

3D Printer Management with web interface.

#### CONNECTIVITY:

Wi-Fi, USB and USB OTG, Ethernet, SATA, Serial Debug, 3.5mm Analog and I2S Digital Audio.

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## ▼ BOOKS (CONTINUED)

**PROGRAMMING ARDUINO®:  
GETTING STARTED WITH SKETCHES**

This entry level book explains what an Arduino® microcontroller actually is (i.e. a very small stand alone computer), introduces you to the Arduino® programming language (called, "C") and then describes the basic configurations of Arduino® modules. It then goes into the detail of getting Arduino®s to deal with the real world, finishing with a discussion on C++ and more sophisticated applications.

- Soft cover, 162 pages, 138 x 215mm



CAT.	Qty 1+
BM-7133	\$24.95

**ARDUINO® WORKSHOP BOOK - 65 PROJECTS**

In Arduino® Workshop you will learn to make projects that add-on to your Arduino® microcontroller platform. The book is very hands-on, describing 65 projects you can make.

**Projects include:**

- A digital thermometer
- A GPS logger
- A handy voltage tester
- A keypad combination lock
- A binary quiz game and much, much more

Lavishly illustrated with very clear text and lots of professional tips for the novice constructor.

- Soft cover, 370 pages, 180 x 235



CAT.	Qty 1+
BM-7137	\$44.95

**PROGRAMMING ANDROID APPS**

The book explains the operation of the Android® OS in a clear step-by-step method. The book offers a wide range of applications based on hands-on examples, covering everything from simple math programs, reading sensors and GPS data, right up to programming for advanced Internet applications. Besides writing applications in the Java programming language, this book also explains how apps can be programmed using Javascript and PHP.

- Soft cover
- 244 pages, 234 x 169 x 14mm



CAT.	Qty 1+
BT-1382	\$64.95

**ARDUINO® + ANDROID PROJECTS FOR THE EVIL GENIUS**

Not particularly evil, but another project oriented book written around Android-type mobile phones and the Arduino® microcontroller. You can, for example turn your Android phone into a Geiger counter, a TV remote controller, etc. Many projects use both the Arduino® and the Android culminating in the creation of a home Automation system.

- Soft cover, 197 pages, 215 x 275mm



CAT.	Qty 1+
BM-7135	\$44.95

**MASTERING THE I²C BUS**

This book takes you on an exploratory journey of the I²C Bus and its applications. In addition to the Bus protocol, focus is given to practical applications and solid design technique. Full of helpful tips and tricks, this book works equally well as an Introductory guide and as a workshop handbook.

- Soft cover, 250 pages
- 235 x 170 x 14mm



CAT.	Qty 1+
BT-1386	\$39.95

**ARDUINO® ROBOT BUILDER'S BONANZA**

This book guides you through the construction of 7 robots that roll, walk, talk, slither and even sling insults at you. All projects feature the Arduino® microcontroller platform. Step-by-step assembly diagrams and instructions provided.

- Soft cover
- 400 pages, 230 x 185mm



CAT.	Qty 1+
BM-7136	\$49.95

**PRACTICAL ARDUINO®**

An indepth book that takes you beyond the basics quite quickly and shows you how to make up a typical application/design. Examples of typical projects, 14 in all are worked through, ranging from simple to quite complex. This is a necessity as it goes to the heart of Arduino®.

- Soft cover, 422 pages
- 235 x 190mm

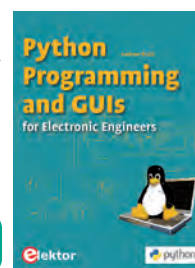


CAT.	Qty 1+
BM-7132	\$54.95

**PYTHON PROGRAMMING AND GUIs**

This book is aimed at engineers, scientists and hobbyists who want to interface PCs with hardware projects using Python code graphic user interfaces. The book covers both desktop and web based applications. It guides you through starting with Linux® by way of a free downloadable, live bootable distribution that can be ported around different computers without requiring hard drive installation. Practical demonstration circuits and downloadable, full software examples are provided that can be the basis for further projects. It also shows you how you can customize your own live Linux® bootable CD to include your own projects.

- Soft cover
- 224 pages. 235 x 170 x 14mm



CAT.	Qty 1+
BT-1380	\$59.95

**ARDUINO® CIRCUIT & PROJECTS GUIDE**

From basic to more elaborate projects are covered, so that even students and teachers with some pre-existing technical knowledge will encounter new challenges. The skill and experience level required for these projects ranges from absolute beginner, to hobbyist-expert. Beginners will benefit from progressing through the book as they build their skills, while experienced readers will find it a useful handbook.

- Programming essentials
- Simple entry level projects
- Interface and hardware extensions
- Complex applications for advanced users
- Soft cover
- 260 pages. 235 x 170 x 15mm

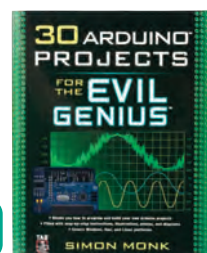


CAT.	Qty 1+
BM-7142	\$69.95

**30 ARDUINO® PROJECT FOR THE EVIL GENIUS**

This is a practical project oriented book describing lots of projects based around the Arduino® microcontroller. Be warned, there is nothing intrinsically evil about this book. The title is a catchy marketing department trick. It does have, however, 30 practical projects which specify components which are mostly available from Jaycar. Hours & hours of evil fun.

- Soft cover, 191 pages.
- 220 x 275mm



CAT.	Qty 1+
BM-7134	\$44.95



## PROTOTYPING BREADBOARDS & JUMPER LEADS

### MINI BREADBOARD WITH 170 TIE POINTS

With self-adhesive tape on the back, it is ideal for DIY projects including Arduino®. It has 17 holes x 10. Total 170 holes. It can also be permanently mounted with screws (not included).

- Nubbins and slots on the sides to connect multiple breadboards together
- Dimensions: 46(L) x 35(W) x 9(H)mm
- Weight: 14g

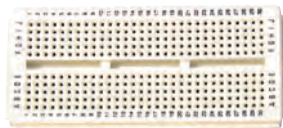


CAT.	Qty 1+	Qty 5+
PB-8817	\$4.95	\$4.45

### MINI BREADBOARD

One terminal strip supplied which gives 30 holes x 10. Total 300 holes.

- Dimensions: 39(W) x 87(L)mm

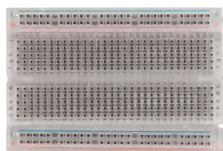


CAT.	Qty 1+	Qty 4+	Qty 10+
PB-8832	\$12.95	\$11.35	\$10.35

### BREADBOARD WITH 400 TIE POINTS

Mid-sized prototyping breadboard with 400 tie points.

- 300 tie points in centre section
- 100 tie points on power rails
- Dimensions: 83 x 55 x 10mm

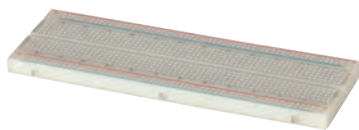


CAT.	Qty 1+	Qty 5+	Qty 10+
PB-8820	\$7.95	\$7.15	\$6.35

### BREADBOARD WITH 830 TIE POINTS

With labelled rows and columns and adhesive back for mounting, it is ideal for electronic prototyping and Arduino® projects.

- Tie points: 830
- Distribution holes: 200
- Terminal holes: 630
- Nubbins and slots on the sides to connect multiple breadboards together
- Dimensions: 165(L) x 54(W) x 9(H)mm, 74g



CAT.	Qty 1+	Qty 5+
PB-8815	\$14.95	\$13.45

### BREADBOARD - LARGE SCALE

- 1660 tie points
- 400 distribution holes / 1280 terminal holes
- Mounted on a metal plate
- 3 banana terminals
- Rubber feet
- Dimensions: 157(W) x 237(H)mm
- Board size: 130(W) x 175(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
PB-8816	\$43.95	\$38.45	\$34.95

### ACRYLIC BASE FOR UNO AND BREADBOARD

This compact acrylic board allows mounting an Uno (or Leonardo) and PB8820 sized breadboard to create an easy to use prototyping station.

- Measures 120mm x 83mm
- Self-adhesive rubber feet
- Plastic mounting screws for Arduino® board

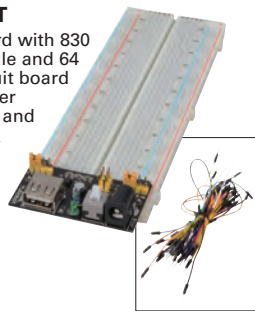


CAT.	Qty 1+	Qty 4+	Qty 10+
PB-8840	\$12.95	\$11.45	\$9.95

### SOLDERLESS BREADBOARD WITH POWER SUPPLY & JUMPER LEAD KIT

This kit comprises of a solderless breadboard with 830 connection tie-points, a power supply module and 64 pieces of mixed jumper leads. Ideal for circuit board prototyping and Arduino® projects. The power module can be plugged into the power rails and can be powered from either a 12V plug pack or from 5V using the USB socket, and has a switchable output between 3V and 5VDC.

- 1 x Solderless Breadboard with 830 Points
- 1 x Power Supply Module
- 64 mixed jumper wires of different lengths and colours



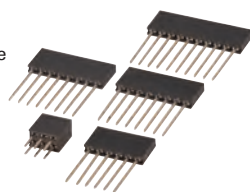
CAT.	Qty 1+	Qty 5+
PB-8819	\$19.95	\$17.95

### STACKABLE HEADER

Build a stackable shield, or make your current shield stackable with the Duinotech Stackable Headers. Alternatively, shorten the pins to make female headers just like the Duinotech main boards.

Includes:

- 1 x 10-pin
- 2 x 8-pin
- 1 x 6-pin
- 1 x 2x3-pin (for ICSP)

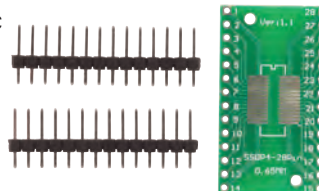


CAT.	Qty 1+	Qty 4+	Qty 10+
HM-3208	\$4.50	\$4.05	\$3.60

### 28 PIN SOIC/SOP TO DIP BREADBOARD ADAPTOR

More and more IC's are now only available as surface mount variants, making prototyping harder. The SMD breadboard adaptor allows SMD IC's and other smaller pitch components to be used with standard 0.1" prototyping equipment such as breadboard and protoboard.

- Suits 4-28 pin SOP/SOIC IC's (SOIC on one side, SOP on the other)
- 1.27mm pitch and 0.65mm pitch
- Header strip included



	CAT.	Qty 1+	Qty 10	Qty 25
28 pin SOIC/SOP to DIP Adaptor	PI-6530	\$2.95	\$2.62	\$2.35

### BREADBOARD POWER MODULE

Receiving power from a USB socket or DC socket, this module adds a compact power supply to your breadboard.

- Plugs straight into most bread boards
- Can be set to 3.3V or 5V
- Concave design saves space
- Dimensions: 57 x 24 x 21mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	XC-4606	\$9.95	\$8.75	\$7.75

### BREADBOARD JUMPER KIT

This kit consists of 70 pcs of single core sturdy wire which has been stripped on each end and bent at right angles.

- Specifically made for breadboards
- There are 5 pcs each of 14 different lengths



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PB-8850	\$13.50	\$11.35	\$10.35

### ECONOMY BREADBOARD JUMPER KIT

Solid core hookup cable, which is the ideal size for breadboards. Cut it to whatever lengths you require and strip the ends.

2 metres each of 5 colours Colours may vary from time to time.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Per Pack	WH-3032	\$4.50	\$3.95	\$3.60

## ✓ PROTOTYPING BREADBOARDS & JUMPER LEADS

### 150MM JUMPER LEADS - 40 PIECES

A pack of 40 jumper leads of various colours for prototyping. Ideal for Arduino® and DIY projects. Each flexible lead is 150mm long with pins to suit breadboards or PCB headers.

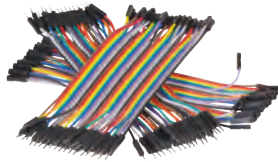


	CAT.	Qty 1+	Qty 5+
Plug to Plug	WC-6024	\$5.95	\$5.35
Socket to Socket	WC-6026	\$5.95	\$5.35
Plug to Socket	WC-6028	\$5.95	\$5.35

### JUMPER LEAD MIXED PACK - 100 PIECES

A mixed pack of jumper leads for your Arduino®, breadboarding and prototyping projects.

- 30 Plug-Plug
- 40 Plug-Socket
- 30 Socket-Socket
- All 150mm long



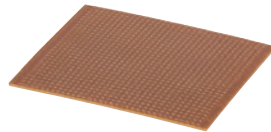
	CAT.	Qty 1+	Qty 5+
	WC-6027	\$14.95	\$13.45

## ✓ PCB EXPERIMENTING & PROTOTYPING

### PC BOARDS - VERO TYPE STRIP

Alphanumeric grid, pre-drilled 0.9mm, 2.5mm spacing.

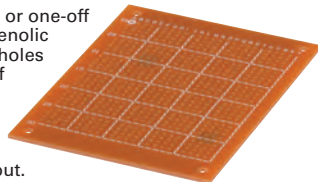
- Dimensions: 95mm wide x 3 handy lengths



	CAT.	Qty 1+	Qty 4+	Qty 10+
75mm	HP-9540	\$4.50	\$3.95	\$3.60
152mm	HP-9542	\$7.95	\$6.95	\$6.25
305mm	HP-9544	\$11.50	\$10.35	\$8.95

### UNIVERSAL PRE-PUNCHED EXPERIMENTER'S BOARDS

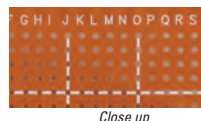
The low cost way to build prototype or one-off projects. We now stock 3 sizes of phenolic board that has a matrix of punched holes on 0.1" (2.5mm) pitch with 'donut' of tin plated copper around each hole. Finally the non-solder side of the board has an alphanumeric grid printed on it to assist in the component identification board layout.



**SMALL** - HP-9550  
95 x 72mm, 25 x 30 holes (750)  
3.6mm edge pitch.

**MEDIUM** - HP-9552  
140 x 95mm, 29 x 50 holes (1450)  
2.5mm edge pitch.

**LARGE** - HP-9554  
210 x 78mm, 24 x 67 holes (1608)  
3.6mm edge pitch.



Close up

	CAT.	Qty 1+	Qty 4+	Qty 10+
Small	HP-9550	\$4.50	\$3.95	\$3.60
Medium	HP-9552	\$6.95	\$6.25	\$5.50
Large	HP-9554	\$8.95	\$7.95	\$6.95

### UNCLAD PUNCHED LAMINATE

A single 150(L) x 70(W)mm strip of phenolic punched at 0.1" (2.5mm) grid with NO laminate (copper) on either side.

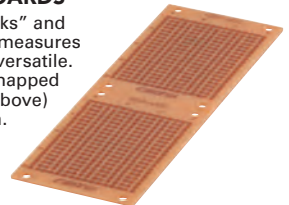


	CAT.	Qty 1+	Qty 4+	Qty 10+
	HP-9562	\$5.50	\$4.90	\$4.30

### ULTRA MINI EXPERIMENTER'S BOARDS

20 holes deep by 16 holes wide with "links" and "strips" (bus rails) every 2 holes. Board measures a compact 65 x 45mm and is extremely versatile. Supplied as a pair, end-to-end. Can be snapped apart to make two boards (dimensions above) or one 130 x 45mm 0.3" wide x 0.1" pitch.

- Ideal for DIL ICs in small numbers



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HP-9556	\$4.95	\$4.45	\$3.90

### IC EXPERIMENTER'S BOARD

You can fit dozens of DIL ICs on this board. 30 holes deep x 50 holes wide, with a "link"/"strip" (bus rails) pattern enabling alternate V+ and earth rails. Very versatile.

- Alphanumeric markings on grid pattern
- Dimensions: 140 x 95mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HP-9558	\$6.95	\$6.25	\$5.50

### SPOT FACE CUTTER FOR STRIP BOARDS

The spot face cutter is designed to neatly remove copper strip on strip type prototyping boards. Insert the tool in the pre-drilled hole and rotate it until the track is removed entirely. Easy to use and much more efficient than other methods.

- Dimensions:  
Handle: 60(L) x 17(W) x 17(D)mm  
Total Length: 110mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TD-2461	\$8.95	\$8.25	\$6.95

### BREADBOARD LAYOUT PROTOTYPING BOARDS

A prototyping board that lets you transfer your breadboard design without having to rework it. Includes five holes on each side per row and power rails running the length of the board.

Two sizes to choose from.

- SMALL:**
- 25 rows
  - 400 holes
  - Similar layout to PB-8820
  - 73mm x 47mm x 1.4mm
- LARGE:**
- 59 rows
  - 862 holes
  - Similar layout to PB-8815 Breadboard
  - 155mm x 58mm x 1.4mm

HP-9570

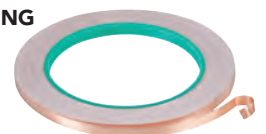


HP-9572

	CAT.	Qty 1+	Qty 4+	Qty 10+
400 hole	HP-9570	\$4.95	\$4.45	\$3.95
862 hole	HP-9572	\$9.95	\$8.95	\$7.95

### COPPER TAPE WITH ADHESIVE BACKING

- Solderable
- Repair printed circuit boards
- Create antennas and shielding
- 5mm x 25m

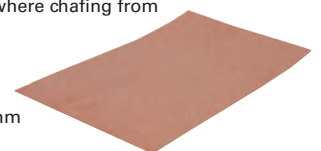


	CAT.	Qty 1+	Qty 4+	Qty 10+
25m	NM-2870	\$6.95	\$6.25	\$5.55

### PRESSBOARD INSULATION MATERIAL

Similar to Presspahn Elephantide®, this product is a heavily pressed craft-type board which is used as an insulator in mains products. It can be scored, folded and formed into many shapes, particularly into boxes or partitions to isolate mains circuits from fingers. It has good abrasion resistance and is often used in areas where chafing from vibration can occur.

- Thermal Rating: 150°C
- Dielectric Strength: 12kV/mm
- Sheet thickness: 0.8mm
- Sheet dimensions: 225(H) x 208(W)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HG-9985	\$4.95	\$4.45	\$3.90



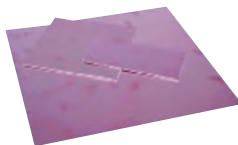
Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store. \* Conditions apply.

## PCB MAKING

### BLANK FIBREGLASS PCB

Pure copper bonded to quality fibreglass base.

- HP-9514, 9512, 9510 are single sided
- HP-9515 is double sided



	CAT.	Qty 1+	Qty 4+	Qty 10+
150x75	HP-9514	\$5.95	\$5.25	\$4.75
150x150	HP-9512	\$8.95	\$7.95	\$6.95
150x150	HP-9515	\$9.95	\$8.75	\$7.75
300x300	HP-9510	\$19.95	\$17.95	\$15.95

### ETCH RESISTANT & WATERPROOF PEN

The ink from the pen is etch-resistant so you have a quick and simple way of making a PCB! Being waterproof it is also great for labeling things on or about the boat, caravan or motor home. The ink will wash off afterwards with metho, turps, etc.

- Excellent smudge-proof and waterproof qualities
- Dries in seconds
- Low-odour ink
- Xylene and toluene-free ink
- Line width fine approx. 0.6mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
Blue	TM-3002	\$4.95	\$4.45	\$4.00

### PCB ETCHING KIT

An ideal kit for anyone needing to etch a circuit board - complete with an assortment of copper boards, etchant, working bath and tweezers. It also includes a positive acting photosensitive PCB and developer.

#### Supplied with:

- 1 x Plastic bath to accept PCBs up to 180 x 110mm
- 1 x Photosensitive single sided PCB
- 1 x Sachet of positive developer for Riston
- 1 x 100g sachet of sodium persulphate etchant
- 1 x Plastic tweezers Assortment of PCB's, instructions



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HG-9990	\$27.95	\$24.95	\$22.35

## PROTOTYPING ACCESSORIES

### POLYMORPH PELLETS

Polymorph will change the way you make parts. It's a commercial grade thermoplastic that softens enough to be formed into any shape at around 62 - 65° C. You simply heat the pellets in hot water. It hardens at room temperature to form a tough plastic material similar in consistency and colour to Nylon. It can be drilled, sanded, ground, machined, painted or heated and reformed again and again. Endless uses in model making, craft, single part manufacture, prototyping, engineering, science, lab and more.

- Supplied in a 100g bag of 3mm pellets.

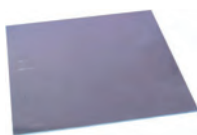


This car was moulded in minutes using a car baking tin!

	CAT.	Qty 1+	Qty 4+	Qty 10+
	NP-4260	\$11.50	\$10.35	\$8.95

### ALUMINIUM SHEET

18 gauge.



	CAT.	Qty 1+	Qty 4+	Qty 10+
295 x 295mm	HM-9500	\$13.95	\$12.35	\$10.95

### AMMONIUM PERSULPHATE 250G

The alternative to Ferric Chloride. Mix one part etchant with 5 parts hot water to etch copper board. Contents will etch about 300sq/cm.

- 250 grams



	CAT.	Qty 1+	Qty 4+	Qty 10
Ammonium Persulphate 250g	NC-4258	\$11.95	\$10.45	\$9.45

### PCB WASH DEFLUXING SOLUTION

Removes flux and residue from circuit boards to provide an extremely clean and contaminant free surface. The ready to use solution can be safely used in ultrasonic tanks for various applications including: jewellery, metal parts degreasing, removing flux and cleaning sensitive electronic parts. Appropriate for both static and ultrasonic cleaner use.

- Non-flammable
- Water-based (Biodegradable)



	CAT.	Qty 1+	Qty 4+	Qty 10+
1 Litre Bottle	NA-1070	\$14.95	\$13.45	\$11.95

### PRESS 'N' PEEL FILM

This is by far the easiest way to make Printed Circuit Boards from CAD software or magazine PCB layout artwork. You simply make the PCB image by putting a Press 'n' Peel sheet of transfer film in the paper tray of a photocopier or laser printer (The sheet size is almost the same as the A4 paper tray). You then print or copy the PCB track image onto the film. Using a domestic clothes iron you press the image onto a precleaned piece of copper clad PCB. The image transfers to the copper and the image will not etch away. Ammonium persulphate or ferric chloride are both OK. You get 5 sheets of 215 x 280mm transfer film in each pack. Full instructions are supplied.

#### 4 Easy Steps:

1. Print or Copy
2. Iron on
3. Peel off
4. Etch



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HG-9980	\$35.00	\$31.45	\$27.95

### ETCH YOUR OWN PC BOARDS BOOKLET

Need just one or two printed circuit boards, for a magazine project or a prototype for your latest design? It's not too hard to etch your own single sided or even double sided boards, especially if you have access to a photocopier or a PC and laser printer. In this tech update we tell you all you need to know.



	CAT.	Qty 1+
	BI-8212	\$2.00

See page 225 for our Metal Bending Pliers

### PERSPEX - RED

- 3mm thick
- Supplied with peel-off film



	CAT.	Qty 1+	Qty 4+	Qty 10+
Red 195 x 195mm	HM-9505	\$13.95	\$12.35	\$10.95

### CLEAR ACRYLIC SHEET

General purpose clear acrylic (Perspex) sheet for hobby use. Suitable for displays etc.

- Supplied with peel-off protection film



	CAT.	Qty 1+	Qty 4+	Qty 10+
195 x 195 x 3mm	HM-9509	\$13.95	\$12.35	\$10.95



This product is compatible with Raspberry Pi



This product is compatible with Arduino®



## CONDUCTIVE COMPOUNDS

### WIRE GLUE

A soldering iron in a jar. Wire Glue is a electrically conductive adhesive that enables you to make solder-free connections when you don't have a soldering iron handy, or can't apply heat for some reason. Hundreds of hobby, trade and electronics uses. Lead-free, cures overnight.



	CAT.	Qty 1+	Qty 4+	Qty 10+
9ml	NM-2831	\$9.95	\$8.75	\$7.75

### CONDUCTIVE CARBON GREASE

Lubricates and improves electrical and thermal connections between sliding surfaces, while providing protection from moisture & corrosion. Excellent for use on switches and EMI shielding applications. Industrial, trade and hobby use. 50 gram tube.

- Prevents normally closed switches from corroding in place.
- Reduces make-break arcing and pitting of switch contact surfaces
- Improves the connection between irregular or pitted contact surfaces
- Reduces EMI noise by maintaining a continuous path between conductive surfaces
- Thermally stable up to 200°C
- Density: 2.7 g/ml
- Electrical resistivity: 117 ohms/cm



See page 137 for Heatsink Compound

	CAT.	Qty 1+	Qty 4+	Qty 10+
50g	NA-1034	\$9.95	\$8.75	\$7.75

### STAINLESS STEEL CONDUCTIVE THREAD 2M

A highly flexible thread made conductive by the inclusion of stainless steel strands. You can feel the extra weight that the stainless steel gives. The thread is a dark silvery grey, and is great for adding electrical elements to textiles such as fabric.

- Maximum current 500mA
- Tie onto modules and components to make a connection
- 2m length per pack



	CAT.	Qty 1+
Conductive Thread 2m	WW-4100	\$6.95

### PRECISION CONDUCTIVE INK

This is a highly conductive polymer for use in a variety of applications and is an indispensable tool for fixing damaged circuit board tracks. Apply instant traces on most surfaces (epoxy, glass, plastic, metal). Draw traces on circuit boards, repair defective traces, make jumpers and shield electronics, design prototype circuits and repair rear-window heater traces.

- 1mm track trace width
- 0.02 Ohm per mm resistivity

After heat curing only.  
Use low temperature soldering (less than 180°C/350°F) for not more than 5 seconds. Use low temperature soldering iron.

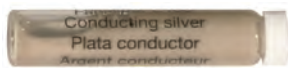


	CAT.	Qty 1+	Qty 4+	Qty 10+
	NS-3033	\$39.95	\$35.95	\$31.95

### SILVER CONDUCTIVE VARNISH

This silver conductive varnish adheres well to glass, PCB material, ceramics etc. Repairs printed circuits, window antennas, window alarm loops etc. Very good conducting properties.

- Approximately 0.02 - 0.1 Ohms/cm2



	CAT.	Qty 1+	Qty 4+	Qty 10+
	NS-3030	\$13.95	\$12.55	\$11.15



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## CLEANING PRODUCTS

### ISOPROPYL ALCOHOL CLEANING PADS

Removes contaminants from metal, plastic & painted surfaces.

- Also ideal for cleaning computers
- Packet of 10



	CAT.	Qty 1+	Qty 4+	Qty 10+
Pkt 10	NA-1060	\$4.95	\$4.45	\$3.90

### INOX PREMIUM GRADE MACHINERY GREASE

General-purpose synthetic grease in a handy 30gm tube size. Ideal for bearings, ball joints, chains, sprockets, O-rings, bushes & other rubber and plastic etc.

- Food grade
- High temperature, non-melt
- Highly resistant to water, salt, chemicals and drying
- Fully synthetic



	CAT.	Qty 1+	Qty 4+	Qty 10+
30g	NA-1032	\$9.95	\$8.75	\$7.75

### DEOXT PROGOLD CONTACT CLEANER & REJUVENATOR

Simple cleaners wash away dirt, grime, and dust from your expensive equipment but are often ineffective at cleaning tough oxidation and metal sulphide contamination. This product will not only clean, but it will help restore your equipment to its original condition, improving its performance.

Kit contains:

- DeoxIT power booster 74ml
- DeoxIT ProGold conditioning treatment 74ml
- 2 x brush applicators
- 4 x swabs
- Lint free cloth



	CAT.	Qty 1+	Qty 4+	Qty 10+
Kit	NS-1436	\$29.95	\$26.95	\$23.95

## ANTI-CORROSION

### TEF-GEL ANTI-CORROSION, ANTI-SIEZING, ANTI-GALLING SYRINGE

This product is far superior to a similar product we sold last year. Its main use is to prevent dissimilar metals when fastened together from corroding due to galvanic action. For example, you fasten down a stainless steel sail track slide to the metal deck of a yacht; you use this product to prevent dissimilar metal electrolytic corrosion. That's all the other product was good for. This product also stops rotating objects from seizing and prevents galling in stainless steel screw fasteners. It also protects electrical terminals/connectors.

- Will not cold flow or dry out
- Is resistant to salt water and detergents
- Has an indefinite shelf life
- Contains PTFE (Teflon®) and NO (0%) volatile solvents, no silicone, or petroleum solvents. Nothing to evaporate
- It is dielectric (Non-electrical conducting)
- No known hazardous ingredients
- High flashpoint
- Non toxic

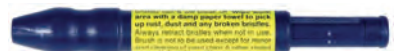


	CAT.	Qty 1+	Qty 4+	Qty 10+
10ml	NA-1040	\$24.95	\$22.45	\$19.95

### CORROSION BUSTER PEN

This pen-type product enables you to remove rust, spot corrosion and clean burnt contacts etc, without abrasion utilising the 20,000 tiny glass fibres at the tip of the pen. It has an amply sized body with finger indent to provide a comfortable & secure grip while the adjustable length allows for more aggressive cleaning when required.

- 120mm long x 14mm dia



	CAT.	Qty 1+	Qty 4+	Qty 10+
	NA-1410	\$24.95	\$22.45	\$19.95

## MOTORS & GEARBOXES

### LOW COST MOTOR / GEARBOX SET

This unit comes complete with a 3V 12,000 rpm motor\*. It can be stepped down (with the consequent torque multiplication) up to six times as shown below. The motor is fitted with a 12 tooth pinion and the small gear cluster is 12 tooth. The large clusters are all 48 tooth. Not all gears need to be used. The intermediate output shafts are hardened steel, 3mm dia. Also supplied are press fit pulleys. The whole assembly snaps together. Hand tools are almost unnecessary.

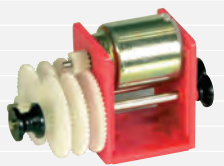
\*Motor can also be varied by changing input voltage but this lowers torque.

Motor cage - 40H x 25W x 28Dmm

Gearbox cluster - 40(W) x 25(D) x 30(H)mm

Main & intermediate shafts - 63 x 3mm Dia. Supplied in kit form.

SPECIFICATIONS	RPM
12,000 x 12/48	3,000
3,000 x 12/48	750
750 x 12/48	187.5
187.5 x 12/48	46.875
46.875 x 12/48	11.72
11.72 x 12/48	2.93



CAT.	Qty 1+	Qty 5+	Qty 10+
YG-2730	\$12.95	\$11.35	\$10.35

### DUAL MOTOR GEARBOX KIT

Twin motor gearbox kit is great for simple robot and tank projects. Independent motors for skid-steer controls.

- Rubber tired wheel and crank arm options
- Mountings for horizontal and vertical use
- Three gear ratios included, can be changed by building with different gears from kit
- 1:60, 200RPM
- 1:120, 100RPM
- 1:288, 42RPM



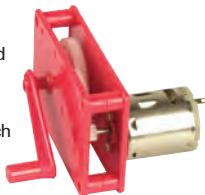
CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9029	\$19.95	\$17.95	\$15.95

## Tech Talk: Gearbox Speeds

**Note: All DC motors and motor gearboxes can change speed to a considerable amount by changing voltage within specified limits. This reduces need for special gear ratios for your application.**

### HAND CRANK DYNAMO WITH GEARED MOTOR

Here's a great gadget that will allow you to add Green power to any of your projects. What we have here is a hand crank dynamo, pre-assembled but easily modified to be retro-fitted to existing equipment or added to new projects. Crank the handle and the specially designed gear set will operate the motor and produce a DC voltage which can be used for a variety of low current uses (charging batteries, lights etc). Crank slowly and the voltage is low, crank harder and the voltage is higher. Made from plastic - easy to re-work to fit your projects.



CAT.	Qty 1+	Qty 5+	Qty 10+
MD-7000	\$19.95	\$17.95	\$15.95

## STEPPER MOTORS

### 12VDC 48 STEP / 7.5° STEPPER MOTOR

Standard 48 step / 7.5° design, with flange mount 3.0mm hardened steel shaft. Suitable for object control, numerical control etc.

SPECIFICATIONS	YM-2754
Rated Voltage	12VDC
Rated Current	1.1A/phase
Phases	4
Steps Per Revolution	48
Stepping Angle	7.5°
Drive Method	Unipolar chopper drive
Resistance Per Winding	20 ohms
Holding Torque	700g.cm



CAT.	Qty 1+	Qty 5+	Qty 10+
YM-2754	\$24.95	\$22.35	\$19.70

### NEMA17 STEPPER MOTOR

Two phase stepper motor with 1.8° ±5% per step.

SPECIFICATIONS	YM-2756
Voltage	12VDC
Operating Current	1.7A per phase
Stepper Control	4 wire
Torque	54g/cm²
Holding Torque	40g/cm²



CAT.	Qty 1+	Qty 5+	Qty 10+
YM-2756	\$49.95	\$44.95	\$39.95

## MOTORS

### STANDARD DC MOTORS

THESE ARE NOTTOY MOTORS

Each motor briefly described below is a quality product with hardened drive shaft, sintered bearings and quality commutator brushes etc. They are ideal for any application where a compact high torque and reliable motor is required. Each motor is provided with a full data sheet which includes motor speed/torque/current/efficiency curves etc. Generous discounts for quantity purchases.

- 2.3mm driveshaft
- M2.6 threaded mounting
- Generously ventilated
- Solder tag terminals



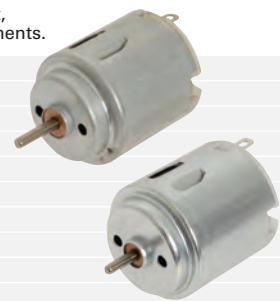
SPECIFICATIONS	YM-2712	YM-2716	YM-2718
VOLTAGE (V)	6	12	12
NO LOAD			
Speed (rpm)	13,500	14,500	13,000
Current (A)	0.55	0.28	0.67
AT STALL			
Torque (g.cm)	191	372	1,200
Current (A)	5.6	5.21	17.2
AT MAX EFFICIENCY			
Efficiency (%)	49.6	66.1	55.1
Power (W)	5.96	5.56	26.5
Speed (rpm)	9,679	13,544	10,489
Torque (g.cm)	60	40	246
Current (A)	2	1.0	4.0
AT MAX POWER			
Speed (rpm)	7,845	8,266	9,304
Torque (g.cm)	80	160	326
Current (A)	2.6	2.4	5.0
DIMENSIONS (mm)			
Diameter	27.6 / 2.3	27.6 / 2.3	35.8 / 3.175
Total / Shaft Length	51 / 12.5	57 / 13	71 / 9.5
Mounting Thread Dia	2.6	2.6	3

RPM	VOLT	CAT.	Qty 1+	Qty 5+	Qty 10+
16,200	6	YM-2712	\$8.50	\$7.50	\$6.75
14,500	12	YM-2716	\$9.95	\$8.75	\$7.75
14,600	12	YM-2718	\$14.95	\$13.35	\$11.70

### HOBBY MOTORS

Two models available. Ideal for hobbyist, experimenters, robotics and as replacements.

SPECIFICATIONS	YM-2706	YM-2707
Torque	Low	Medium
Operating Volts	1.5-4.5V	1.5-4.5V
Nominal Volts	3V	4.5V
Speed (No Load)	12000rpm	12500rpm
Current (No Load)	0.28A	0.25A
Speed (Max Eff)	8540rpm	9560rpm
Current (Max Eff)	0.69A	0.81A
Torque (Max Eff)	7.94gcm	17.86gcm
Diameter	20mm	23.6mm
Total Length	25mm	25mm
Shaft Length	8.1mm	6.5mm
Shaft Dia	2mm	2mm

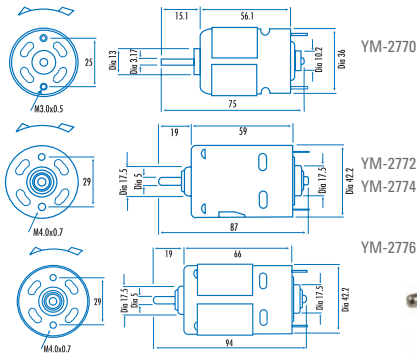


	CAT.	Qty 1+	Qty 5+	Qty 10+
Low	YM-2706	\$3.50	\$3.15	\$2.75
Medium	YM-2707	\$4.95	\$4.45	\$3.90

## MOTORS (CONTINUED)

### STANDARD (HIGH POWER) DC MOTORS

High speed and power from these compact ferrite magnet type DC motors. All units feature hard steel drive shafts, long life design and are built in an ISO 9002 quality environment.



SPECIFICATIONS	YM-2770	YM-2772	YM-2774	YM-2776
<b>VOLTAGE (V)</b>	12	6	12	12
<b>NO LOAD</b>				
Speed (rpm)	11,800	20,000	18,800	9,700
Current (A)	0.8	4.0	2.6	1.3
Operating Range (V)	6-12	3-6	6-12	6-18
<b>AT STALL</b>				
Torque (g.cm)	2700	1910	4900	6000
Current (A)	26	67	92	57
<b>AT MAX EFFICIENCY</b>				
Efficiency (%)	76	57	71	73
Power (W)	43	45	107	52
Speed (rpm)	9800	13730	15520	8490
Torque (g.cm)	420	320	670	600
Current (A)	4.7	13.5	12.8	6.0
<b>DIMENSIONS (mm)</b>				
Diameter	36	42	42	42
Total / Shaft Length	75 / 15	87 / 19	87 / 19	94 / 19
Shaft Diameter	3.17	5.0	5.0	5.0
Mounting Thread	M3	M4	M4	M4

RPM	VOLT	CAT.	Qty 1+	Qty 5+	Qty 10+
11,800	12	YM-2770	\$12.95	\$11.35	\$10.35
20,000	6	YM-2772	\$18.95	\$17.05	\$15.15
18,800	12	YM-2774	\$17.95	\$15.95	\$14.35
9,700	12	YM-2776	\$17.95	\$15.95	\$14.35

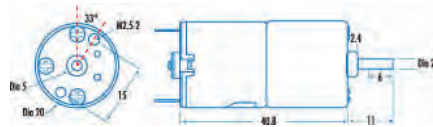
### 12V DC REVERSIBLE GEARHEAD MOTORS

The motors work equally well in forward or reverse motion. More specifications available on our website.

SPECIFICATIONS	YG-2732	YG-2734	YG-2738
<b>Torque G.cm</b>	2100	12,000	50,000 @ 55rpm
<b>Rated Voltage (Volts)</b>	12.0V	12.0V	12.0V
<b>Operating (Volts)</b>	4.5 - 18Vmax	4.5 - 18Vmax	6 - 12Vmax
<b>Current - No Load (Ma)</b>	30	70	<450mA
<b>Current - Full Load (Ma)</b>	390	1380	14000
<b>Gear Ratio</b>	82:1	244:1	50:1
<b>Shaft Speed (Rpm)</b>	70	36	160

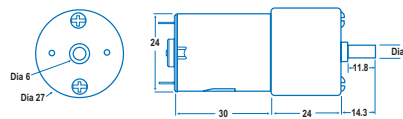
#### YG-2732

This compact unit will give a massive 2.1 kg.cm of torque at 70RPM. Current draw rises to a modest 390mA.



#### YG-2734

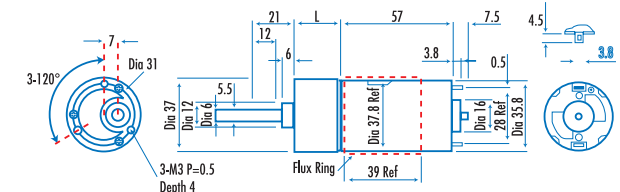
Only slightly larger than the unit above, but with a massive increase in torque at 36RPM. Ideal for driving wheels or other traction devices.



#### YG-2738

For heavy duty applications. Massive 50kgs torque at 55RPM

• Specifications may vary



RPM	VOLT	CAT.	Qty 1+	Qty 5+	Qty 10+
70	12	YG-2732	\$14.95	\$13.35	\$11.70
36	12	YG-2734	\$23.95	\$21.35	\$18.95
55	12	YG-2738	\$43.95	\$38.45	\$34.95

## SERVO

### 9G MICRO SERVO MOTOR

Micro servo motor, perfect for use with XC-4618 Pan and Tilt bracket. Small enough to connect directly to an Arduino® Board for experimenting.

- 3.5V- 6V Supply Voltage
- 500 degrees/second at 6V
- 1.6kg.cm at 4.8V
- Dimensions: 30 x 30 x 10mm

See page 27 for Pan & Tilt Bracket to suit



CAT.	Qty 1+	Qty 5+	Qty 10+
YM-2758	\$9.95	\$8.75	\$7.75

### MINI SERVO 4.8V-6V

Mini sized servo perfect for remote control gadgets or robotics applications where size is at a premium.

SPECIFICATIONS	YM-2760
<b>Dimensions</b>	35(L) x 16.9(W) x 32(H)mm
<b>Weight</b>	26g
<b>Torque 4.8V</b>	3400g.cm
<b>Transit Time 4.8V</b>	0.19 sec/60°
<b>Torque 6V</b>	4200g.cm
<b>Transit Time 6V</b>	0.15 sec/60°



CAT.	Qty 1+	Qty 5+	Qty 10+
YM-2760	\$19.95	\$17.70	\$15.70

### SERVO MOTOR - STANDARD 6V WITH METAL GEAR

- High speed and high torque digital servos
- Dual ball bearing
- Metal gears for maximum strength and durability
- Operating Voltage: 4.8-7.2V
- Connector wire: 32cm
- Includes control horns and screw set
- Weight: 55g
- 40.7 x 19.7 x 42.9mm (standard servo size)
- Operating speed 4.8V: 0.25 sec/60° CAT. YM-2763
- Operating speed 4.8V: 0.20 sec/60° CAT. YM-2765



	CAT.	Qty 1+	Qty 5+	Qty 10+
Torque 4.8V 13kg.cm	YM-2763	\$34.95	\$31.45	\$27.90
Torque 4.8V 11kg.cm	YM-2765	\$34.95	\$31.45	\$27.90

### MICRO LINEAR SERVO MOTOR

These tiny linear servo motors provide 10mm of linear throw with high speed movement. Small and light for RC aircraft. Pack of two units- one left hand and one right hand

- 3.7V - 5V supply voltage
- Measures 22mm x 15mm x 12mm excluding leads
- 0.12s for full travel at 5V
- Worm drive for zero-power position holding



CAT.	Qty 1+	Qty 5+	Qty 10+
YM-2748	\$39.95	\$35.95	\$31.95



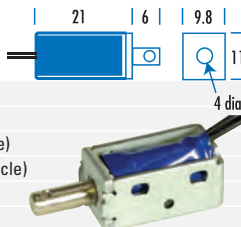
## Solenoids:

Range of DC & AC solenoids and actuators. Made to our factory specifications. You can safely design them in knowing that they will be available over the long term. Generous quantity discounts. See website for datasheets.

### ULTRA MINIATURE 12V

Small square frame unit, Pull type. Full data supplied with unit.

SPECIFICATIONS	SS-0900
Coil Resistance	131Ω 10 watt (max)
Pulling Force	20 - 160g (25% duty cycle)
Stroke	0.5 - 4.0mm (25% duty cycle)
Total Weight	10g
Plunger Weight	2g

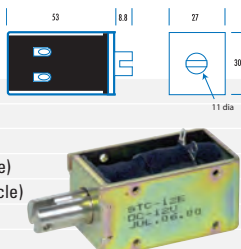


CAT.	Qty 1+	Qty 5+	Qty 10+
SS-0900	\$13.95	\$12.35	\$10.95

### STANDARD 12V

Regular size square frame unit, Pull type, solder tip. Full data supplied with unit.

SPECIFICATIONS	SS-0902
Coil Resistance	24Ω
Rated Power	6 watt
Pulling Force	200g-2kg (25% duty cycle)
Stroke	2.0 - 12mm (25% duty cycle)
Total Weight	205g
Plunger Weight	39g

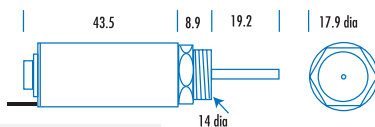


CAT.	Qty 1+	Qty 5+	Qty 10+
SS-0902	\$27.95	\$24.95	\$22.35

### TUBULAR 12V

Compact size, Push type. Full data supplied with unit

SPECIFICATIONS	SS-0903
Coil Resistance	25.6Ω 20 watt @ 25% duty cycle
Pulling Force	220 - 940g (25% duty cycle)
Stroke	1.0 - 6.0mm (25% duty cycle)
Total Weight	81g

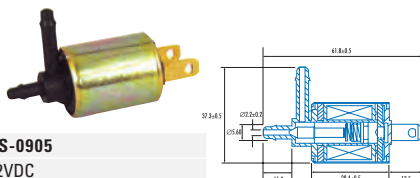


CAT.	Qty 1+	Qty 5+	Qty 10+
SS-0903	\$27.95	\$24.95	\$22.35

### 12VDC SOLENOID VALVE

Air valve solenoid, normally closed. Standard 1/4" Barb type hose fittings

SPECIFICATIONS	SS-0905
Operating Voltage	12VDC
Operating Current	350mA
Air Leakage	1cc/min maxat 4 PSI



CAT.	Qty 1+	Qty 5+	Qty 10+
SS-0905	\$19.95	\$17.95	\$15.95

## Addicted to Social? We're Here to Chat!

- [facebook.com/jaycarelectronics](https://facebook.com/jaycarelectronics)
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- [youtube.com/user/JaycarVideo](https://youtube.com/user/JaycarVideo)

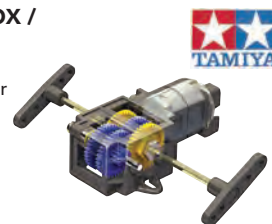
## TAMIYA POWER TRANSMISSION COMPONENTS

### SINGLE MOTOR 4 SPEED GEARBOX / AXLE ASSEMBLY

This brand-new Tamiya product features an all plastic moulded gearbox and motor casing. Included is a FA-30 type 3 volt electric motor, axle with 2 crank arm and tube of grease.

These gear ratios are user selectable:

12.7:1	114.7:1
38.2:1	344.2:1

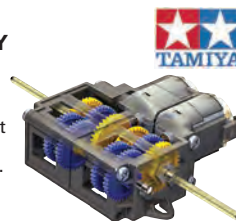


### DOUBLE MOTOR INDEPENDENT 4 SPEED GEARBOX / AXLE ASSEMBLY

Basically a double version of the unit above. Each motor can be separately driven and therefore when wheels are connected could rotate on the spot. Each gearbox is independent so it is possible to set different gear ratios for each box. Includes 2 x FA-30 type 3 volt motors.

The following gear ratios are user selectable:

12.7:1	38.2:1
114.7:1	344.2:1



	CAT.	Qty 1+	Qty 5+	Qty 10+
Double	YG-2741	\$23.95	\$21.35	\$18.95

### PULLEY SET

This set would typically be used to transfer power in small energy systems. Set includes 2 x each 50 & 25mm pulleys, 2 x 11mm pulleys, bushings, screws, nuts and 1 metre of rubber drive band. This type of system will absorb transmission shock.



	CAT.	Qty 1+	Qty 5+	Qty 10+
Large	YG-2869	\$12.95	\$11.35	\$10.35

GERMAN MADE. These precision engineered components are a delight to play with. They offer solutions to small power transmission problems. We make no apologies for the price because well, they are German and they are magnificent quality.

### SOLID SHAFT COUPLERS (FEMALE)

Machining from solid brass stock - 16mm long, 12mm diameter. Type I will connect 2 shafts on a common axis. Type II will reduce from 6.0 diameter to 4.0 diameter.

• Shaft fixed with grub screws

TYPE I CAT. YG-2600

TYPE II CAT. YG-2602

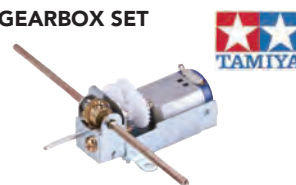


	CAT.	Qty 1+	Qty 5+	Qty 10+
Type I	YG-2600	\$9.95	\$8.75	\$7.75
Type II	YG-2602	\$9.95	\$8.75	\$7.75

### 2 SHAFT UNIVERSAL MOTOR / GEARBOX SET

This gearbox has a main output shaft exiting either side of the gearbox (to drive wheels, for example) and another single-ended shaft at 90° to the former. The gear set can be configured to give 3 set speeds.

• Metal chassis, includes motor



	CAT.	Qty 1+	Qty 5+	Qty 10+
Universal	YG-2742	\$18.95	\$16.95	\$14.95

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.



## WHEEL ACCESSORIES

### GEAR SET & SPUR GEAR SET

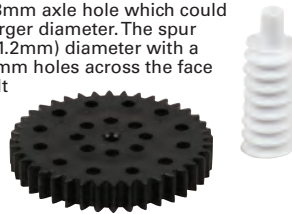
Gear set contains one pinion gear and two different sizes of radio gears. Spur gear set contains three different spur gears.



	CAT.	Qty 1+	Qty 5+	Qty 10+
Gear Set	YG-2630	\$9.95	\$8.75	\$7.75
Spur Set	YG-2632	\$8.95	\$7.95	\$6.95

### WORM DRIVE SET

This set consists of a worm gear 24mm long x 12mm dia with an 8 turn worm screw. The worm has a 2.8mm axle hole which could probably be carefully drilled out to a larger diameter. The spur gear is 1/4" (6.35 wide) and 1 & 5/8" (41.2mm) diameter with a number of regular pitch-concentric 2.8mm holes across the face of the gear including one dead centre. It would be drilled out to accommodate a larger shaft. This gear has 40 teeth. Both are moulded in an engineering grade plastic.



	CAT.	Qty 1+	Qty 5+	Qty 10+
	YG-2736	\$9.95	\$8.75	\$7.75

### 2MM MALE & FEMALE GOLD CONNECTOR CHARGER LEADS

A range of charger, power and test cables with banana plugs, alligator clips and JST connectors, commonly used for toys, robotics, models, remote control hobby. Supplied with one red and one black quick connect 2mm wire set. Ideally used in battery packs or any other applications where good connection is required but can be easily and quickly removed.

- 1 x 2mm female gold connector, 20AWG silicone wire
- 1 x 2mm male gold connector, 20AWG silicone wire
- Both approximately 100(L)mm each



	CAT.	Qty 1+	Qty 10+	Qty 50+
	WC-6018	\$4.95	\$4.45	\$3.90

### ALUMINIUM HUB WITH SET SCREWS

This device will accept a 6.35mm (1/4") shaft, set screw fixed, and connect to the flat face of a gear, typically the flat side of the larger 48 pitch gears.

- Coupling from the gear to the hub by 4 x set screws provided. Enables a motor to be securely fastened to a driving gear
- Hub 7/8" (22.5mm) dia



	CAT.	Qty 1+	Qty 5+	Qty 10+
	YG-2784	\$8.95	\$7.95	\$6.95

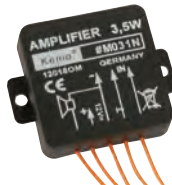
## PRE-ASSEMBLED MODULES

### UNIVERSAL AMPLIFIER MODULES

#### 1 CHANNEL 3.5 WATT

Ideal as a bench-test amplifier for audio sources, or even as a mono headphone amplifier, this small audio amplifier can be operated from 4.5 V up to 12 VDC. Use two for stereo.

SPECIFICATIONS	AA-0223 - 3.5 WATT
Output Power	3.5 W (max)
Operating Voltage	4.5 to 12 V
Speaker Impedance	4-16 ohms
Input Sensitivity	< 80mV
Frequency Response	40Hz-20kHz
Dimensions	30 x 25 x 15 mm



#### 12 WATT

Small audio amplifier module is suitable for a number of purposes and has a range of suitable input voltages and load impedances.

SPECIFICATIONS	AA-0225 - 12 WATT
Operating Voltage	6V - 16V, 800mA (max)
Output Power	12W (max) into 4-16 ohms
Frequency Range	40Hz-20kHz
Input Sensitivity	80mV
Dimensions	62 x 36 x 23mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
3.5W	AA-0223	\$24.95	\$22.45	\$19.95
12W	AA-0225	\$29.95	\$26.95	\$23.95

### MONO AMPLIFIER MODULE

This tiny module uses the LM386 audio IC, and will deliver 0.5W into 8 ohms from a 9V supply making it ideal for all those basic audio projects. It features variable gain, will happily run from 4-9VDC and is smaller than a 9V battery, allowing it to fit into the tightest of spaces.



SPECIFICATIONS	AA-0373
Power	4 - 9VDC
Dimensions	65(L) x 35(W) x 20(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
	AA-0373	\$7.95	\$7.15	\$6.35

### UNIVERSAL PREAMPLIFIER MODULE - 1 CHANNEL

For microphones and diverse uses. This mini-module is simply connected between a power amplifier and a weak signal source (e.g. microphone).

SPECIFICATIONS	AA-0220
Operating Voltage	9 to 24VDC
Frequency Response	20Hz to 20kHz
Input	2-50mV
Output	200mV - 5V
Dimensions	30 x 25 x 15mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
	AA-0220	\$24.95	\$22.45	\$19.95

### MULTI-VOLTAGE REGULATED ADAPTOR MODULE (STEPDOWN)

Ideal for when you need a reliable voltage source for a portable CD player or similar battery-powered device. Another use for this adaptor is for a peripheral computer power supply to power external Blu-Ray drive, powered speakers, modems, etc. Plug the input into your PC's internal power supply cable and get selectable regulated voltage out from 3 to 15VDC\*. Output current capability is around 1.5 amps.

- Dimensions: 63(L) x 24(Dia.)mm

Note: \*Input voltage MUST be larger than the required output voltage.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	AA-0372	\$9.95	\$8.75	\$7.75

### 3 AMP 24V TO 12V REDUCER

Many trucks and boats use 24V systems. These converters will allow you to run a reasonably sized 12V car-stereo or other devices from a 24V supply. Heatsink (not included) should be used for superior performance.

SPECIFICATIONS	AA-0266
Short-Circuit Protection	Thermal cutout
Input Voltage	24 to 26VDC
Output Voltage	12VDC
Maximum Load	3A
Dimensions	135(L) x 50(W) x 24(H)mm
Heatsink	50 x 100 x 30mm (rec. size) use Cat. HH-8572 or similar



	CAT.	Qty 1+	Qty 3+	Qty 6+
	AA-0266	\$29.95	\$26.95	\$23.95

**Automatic Account:** For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.

## PRE-ASSEMBLED MODULES (CONTINUED)

### DC TO DC CONVERTER MODULES

Converter modules that can step-up or step-down voltages so you can power your devices where a different power source is present. This could include powering 12VDC devices from a 6VDC motorbike battery or to run 12VDC devices from a 24VDC battery found in trucks. They feature protection against short-circuits, overload and over-heating. See our website for datasheets.

Three models to choose from:

**DC TO DC STEP DOWN MODULE** AA-0236

**DC TO DC STEP UP MODULE** AA-0237

**24VDC TO 12VDC STEP DOWN MODULE**

(not user selectable) AA-0238

SPECIFICATIONS	AA-0236	AA-0237	AA-0238
Input Voltage	6-28VDC	6-14VDC	24VDC
Output Voltage	3-15VDC	11-26VDC	12VDC
Max Output Current	1.5A	2A	1.1A
Dimensions	60(L) x 45(W) x 20(D)mm	70(L) x 60(W) x 23(D)mm	70(L) x 60(W) x 23(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
1.5A	AA-0236	\$24.95	\$22.35	\$19.70
2A	AA-0237	\$29.95	\$26.95	\$23.70
1.1A	AA-0238	\$24.95	\$22.35	\$19.70

### BATTERY DISCHARGE PROTECTOR

Protects your car battery from total discharge by switching off appliances such as before the battery voltage drops to an unrecoverable level. When battery voltage is reestablished by recharging, it switches appliances on automatically. The interrupting voltage is adjustable from 10.4 to 13.3 VDC. Essential low-cost insurance if you have a dual battery setup in a boat, 4WD, RV or for an alternative energy system such as solar or wind power.

SPECIFICATIONS	AA-0262
Max. Switching Current	12V / 20A
Interrupting Voltage	10.4 - 13.3VDC
Resetting Voltage	approx. 0.8V (+/-0.3V) above interrupt voltage
Current Consumption	< 0.7mA when OFF, < 1.6mA when ON
Dimensions	87(L) x 60(W) x 32(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	AA-0262	\$44.95	\$40.45	\$35.95

### SPEEDO CORRECTOR MODULE FOR CARS

When you modify your gearbox, diff ratio or change to a large circumference tyre, it may result in an inaccurate speedometer. This module alters the speedometer signal up or down from 0% to 99% of the original signal. With this improved model, the input setup selection can be automatically selected and it also features an LED indicator to show when the input signal is being received.

- Power: 12VDC
- Dimensions: 63(L) x 46(W) x 25(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AA-0376	\$44.95	\$40.45	\$35.90

### FREQUENCY RELAY MODULE FOR CARS

It uses a standard tachometer, road speed, or many other pulse outputs to switch a relay. The switch frequency can be set to trip when it is rising or falling, and it features adjustable hysteresis (the difference between trigger on/off frequency). You could configure it to trigger water spray cooling on deceleration, shift light activation, adjustable aerodynamics based on speed, intake manifold switching and much more.

- Dimensions: 72(L) x 65(W) x 43(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AA-0377	\$39.95	\$35.90	\$31.90

### 12 VOLT TWILIGHT SWITCH

This handy module senses the ambient light level and will switch external devices on/off at night and in the morning. The unit operates from 12VDC and its changeover contacts are rated at 25VDC @ 3A. Power consumption is only 2mA so it is ideal for automotive or battery-driven applications. Use it for garden lighting or security applications etc.

- Dimensions: 72(L) x 50(W) x 32(H)mm

	CAT.	Qty 1+	Qty 10+	Qty 25+
	AA-0323	\$27.95	\$24.95	\$22.35



### 12VDC 8A DIMMER/MOTOR SPEED CONTROLLER

DC speed controllers are ideal for slowing down pumps and motors or dimming lights, but some use resistance circuits or rheostats which are very inefficient. The pulse width modulation (PWM) used in this controller allows you to vary the output from 0 to 100% while maintaining a very high efficiency. When used on motors this ensures full torque is available at very low speed and the motor won't shudder at start-up. Operates on any 12VDC system and capable of controlling devices rated at up to 8 amps.

- Internal circuitry is fully potted & the control potentiometer is splash proof making this suitable for marine environments and other harsh conditions
- Dimensions: 97(L) x 46(W) x 47(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC 8A	MP-3209	\$34.95	\$31.45	\$27.95

### MAINS MOTOR & LAMP CONTROLLER

This module can be used for various mains rated applications including lamp dimming, soldering iron temperature adjustment and collector or split-pole motor speed control. Features a 600W continuous and 1200W peak loading capacity with adjustable potentiometer control. Please note: fluorescent, quartz and energy saving lamps, and motors with starting capacitors should not be used with this module.

- Knob included.

SPECIFICATIONS	AA-0346
Continuous Power	600W
Maximum Power	1200W
Dimensions	62 x 35 x 21mm



Please note that this kit operates on 240VAC mains voltage and you should be extremely careful when using these voltages. If in doubt, have an electrician check your work before applying power.

	CAT.	Qty 1+	Qty 5+	Qty 10+
	AA-0346	\$39.95	\$35.90	\$31.90

### PROGRAMMABLE INTERVAL 12V TIMER MODULE

An easily programmed low cost electronic timer. It operates from 12VDC, with low current drain: <50mA when relay is on, <5mA when relay is off. It is link programmed for either a single ON timing period, or continuous ON/OFF cycling and can be link programmed for any of 48 different time periods, separately for ON time and OFF time. Selectable periods are 1/2/3/4/5/6/7/8/10/20/30/40/50/60/70/80 seconds, minutes and hours. It may be restarted at any time simply by pressing reset pushbutton.

SPECIFICATIONS	AA-0378
Power	12VDC
Dimensions	72(L) x 65(W) x 43(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AA-0378	\$39.95	\$35.95	

### 12V 3A TIMER MODULE 2 SECONDS TO 23 MINUTES

A versatile and useful timer module that can be set for periods of 2 seconds to 23 minutes. The start and stop functions are controlled by simple switch inputs and the relay output can control a device of up to 25V 3A.

SPECIFICATIONS	AA-0364
Operating Voltage	12 - 15VDC
Current Consumption	20mA/80mA (Relay off/on)
Relay Point	Single pole, 25VDC, 3A
Time Adjustment	2 sec to 23 min (+/-30%)
Dimensions	87(L) x 60(W) x 33(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AA-0364	\$39.95	\$35.95	\$31.95

### LED TESTER

With this basic but essential tool it is possible to check the function, brightness, colour and polarity of most kinds of light emitting diodes (LED). The LED to be tested plugs into the front panel, at the current you wish to test it with. Two 10mA positions have been included on this multi-LED tester so that comparisons between two LEDs can be made simultaneously.

SPECIFICATIONS	AA-0274
Operating Voltage	9V battery required
Test Currents	1mA, 2.5mA, 5mA, 10mA, 20mA, 50mA
Dimensions	58(L) x 44(W) x 25(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	AA-0274	\$13.95	\$12.35	\$10.95



## Arduino Projects:

Visit your local Jaycar store and check out the live pcDuino demo on display. See how easy it is to connect and get started with this powerful minicomputer. Create your own media centre, or Network Attached Storage (NAS) for your

home or office network, even create a face recognition or a human gesture controlled robot, set your creative imagination to work with the all-powerful pcDuino.

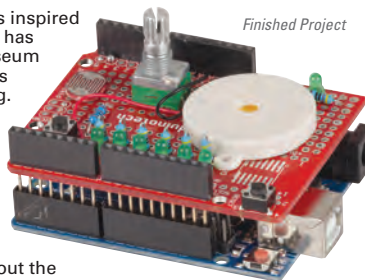
<b>Android Phone Notifier</b>	<b>56</b>	<b>Ethernet IO Controller</b>	<b>23</b>	<b>Secret Knock Detector</b>	<b>57</b>
<b>Arduino Based LED Tester</b>	<b>28</b>	<b>FM Radio - duinotech</b>	<b>56</b>	<b>Snake Game</b>	<b>54</b>
<b>Arduino Game Machine</b>	<b>54</b>	<b>Gaming Console</b>	<b>53</b>	<b>Telescope Dew Heater</b>	<b>57</b>
<b>Arduino Phone</b>	<b>56</b>	<b>ISP Programming</b>	<b>38</b>	<b>Thermostat - duinotech</b>	<b>57</b>
<b>ATmega Programmer</b>	<b>55</b>	<b>Laser Beam Timer</b>	<b>58</b>	<b>Tiny85 Game and Program</b>	<b>54</b>
<b>ATtiny Programmer Shield</b>	<b>54</b>	<b>Lithium Battery Charger</b>	<b>25</b>	<b>Trailer Voltage Monitor</b>	<b>57</b>
<b>Audio Matrix Spectrum</b>	<b>31</b>	<b>LoRa Remote Relay</b>	<b>55</b>	<b>Ultrasonic Distance Reader</b>	<b>34</b>
<b>Battery Night Light</b>	<b>58</b>	<b>Media Player Project - pcDuino</b>	<b>56</b>	<b>Ultrasonic Parking Assistant</b>	<b>33</b>
<b>Breathalyser</b>	<b>58</b>	<b>Metronome - duinotech</b>	<b>56</b>	<b>Ultrasonic Theremin</b>	<b>22</b>
<b>Christmas Clock</b>	<b>35</b>	<b>Oscilloscope - Simple duinotech</b>	<b>58</b>	<b>Wall Dodging Robot</b>	<b>26</b>
<b>Christmas Star</b>	<b>54</b>	<b>Picture Frame - Arduino</b>	<b>53</b>	<b>Wi-Fi Email Notifier</b>	<b>55</b>
<b>Christmas Tree -LED</b>	<b>54</b>	<b>Pong Game</b>	<b>29</b>	<b>WiFi Environmental Datalogger</b>	<b>36</b>
<b>Christmas Tree Singing - LED</b>	<b>54</b>	<b>Programmable Remote Control</b>	<b>56</b>	<b>Wi-Fi Scanner - duinotech</b>	<b>55</b>
<b>Clock - DIY Arduino</b>	<b>96</b>	<b>Resistor and Capacitor Tester</b>	<b>37</b>	<b>Wi-Fi Wireless Power Switch</b>	<b>55</b>
<b>Clock Matrix Multi - Arduino</b>	<b>32</b>	<b>RFID Keypad - Arduino</b>	<b>58</b>	<b>Wireless Garden Monitor</b>	<b>57</b>
<b>Coding Shield</b>	<b>53</b>	<b>RFID Password Typer</b>	<b>32</b>	<b>Yun Shield Dropbox Webcam</b>	<b>53</b>
<b>duinotech Uno Programmer</b>	<b>55</b>	<b>RTC Power Point Timer</b>	<b>24</b>		

### Make Your Own: Coding Shield Project

The Coding Shield Project is inspired by the ThinkerShield, which has been developed by the Museum of Applied Arts and Sciences as a tool for teaching coding. The ThinkerShield is even used in a unit of work for Year 7 and 8 students called 'Crack the Code'. However you might use it, the Coding Shield is a board that allows students to learn software coding without having to worry about the hardware.

Being a project, there's still some construction needed, but it's a project that an older sibling or relative can build for a younger person, or would even make a great assignment for an electrotechnology class, with the finished Coding Shields available to a coding class.

See step-by-step instructions at:  
[jaycar.com.au/coding-shield](http://jaycar.com.au/coding-shield)



Finished Project



### Make Your Own: Leonardo Arcade Joystick

Here we'll show you how to build your very own arcade style joystick using our new Arcade Pushbuttons and Arcade Joystick. We've got a Leonardo main board to emulate a USB keyboard, so it can be used with any software that you can play with a keyboard. Just like any other Arduino® design, it can of course be customised to more buttons or even mapped to different keys. We've built ours in an ABS enclosure for portability, but there's no reason you couldn't mount the controls directly to an arcade cabinet or even a coffee table.

See step-by-step instructions at:  
[jaycar.com.au/arcade-joystick](http://jaycar.com.au/arcade-joystick)



Finished Project

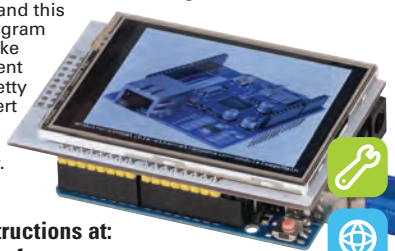


### Make Your Own: Arduino® Picture Frame

There's not a lot to construct in this project- it's just an Uno and LCD Touch Shield, but if you want a simple project that looks slick, then it's a good place to start. We call it a 'Picture' frame because it only supports .BMP bitmap files. It's possible to decode .JPG's with Arduino, but we would need to use a Mega board for the memory requirements, and this approach makes the program more portable if you'd like to use the code in different applications. And it's pretty straightforward to convert your photos into .BMP files for the Arduino® Picture Frame to display.

Finished Project

See step-by-step instructions at:  
[jaycar.com.au/picture-frame](http://jaycar.com.au/picture-frame)



### Make Your Own: Yun Shield Dropbox Webcam

This is a quick & simple project to build - and if you haven't worked with a Linux based system before, you're about to. The Yun Shield is effectively a small Linux based computer with WiFi, Ethernet and USB. By connecting it to an Arduino® board like the Leonardo, we can get the Leonardo to tell it to take photos and upload them to Dropbox. Of course, to do this, you'll need to set up a Dropbox account at [www.dropbox.com](http://www.dropbox.com), which is free to do, and of course, a webcam. We used our QC-3203- other models might work, but have not been tested.

See step-by-step instructions at:  
[jaycar.com.au/yun-dropbox-webcam](http://jaycar.com.au/yun-dropbox-webcam)



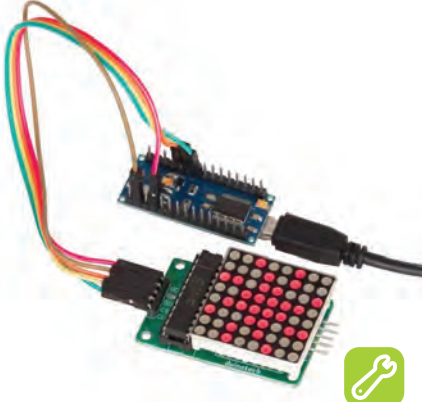
Finished Project



## ▼ CHRISTMAS PROJECTS

### Make Your Own: Jaycar DIY Christmas Star

Help the three wise men find their way with this clever Christmas Star built around the 8 x 8 dot matrix display connected to an Arduino® Nano.



Finished project

See step-by-step instructions at:  
[jaycar.com.au/diy-christmas-star](http://jaycar.com.au/diy-christmas-star)



### Make Your Own: LED Christmas Tree with Music

One of the ideas that sprung to mind when we first got in the XC4380 LED Strip Module was that it would be great for displays like Christmas lights. With Christmas on the way, we've turned them into a miniature Christmas tree complete with music playing from an SD card. Add a little bit of Christmas to your desk or workbench! Some soldering needed.



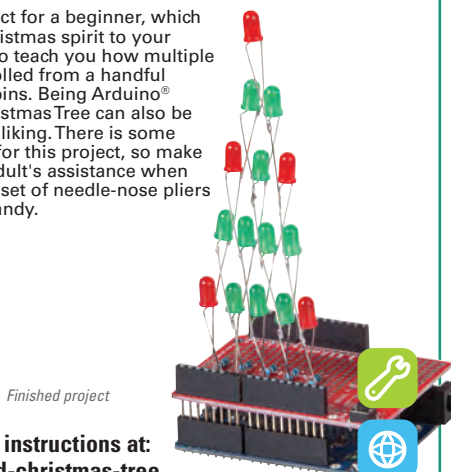
Finished project

See step-by-step instructions at:  
[jaycar.com.au/singing-xmas-tree](http://jaycar.com.au/singing-xmas-tree)



### Make Your Own: Duinotech LED Christmas Tree

Here's a good project for a beginner, which can add a bit of Christmas spirit to your workbench, and also teach you how multiple LED's can be controlled from a handful of microcontroller pins. Being Arduino® based, the LED Christmas Tree can also be customized to your liking. There is some soldering required for this project, so make sure you have an adult's assistance when building the tree. A set of needle-nose pliers will also come in handy.



Finished project

See step-by-step instructions at:  
[jaycar.com.au/led-christmas-tree](http://jaycar.com.au/led-christmas-tree)



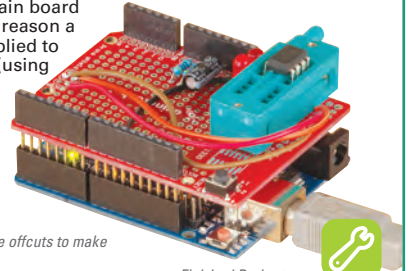
## ▼ GAMES PROJECTS

### Make Your Own: ATtiny Programmer Shield

The best thing about the ATtiny85 IC is undoubtedly its tiny size, but this also makes it difficult to program. No matter how gently you pull it out of its socket, it still seems like the legs get bent (pro-tip: keep the IC in a socket if you are continually moving it to and from a programmer, then the socket takes the wear and tear).

To make our job even easier, we put together an ATtiny Programmer Shield, using a ZIF socket to ensure that the pins are not subject to excessive forces, and wired directly to the SPI pins on the Arduino® so that any Arduino® main board can be used. There's no reason a similar idea can't be applied to even an ATmega328 IC (using a 28 pin ZIF socket instead). We've added some testing LEDs to the pins that aren't used for programming, so you can quickly test that the chip is working too.

Note: You'll also need some wire offcuts to make some connections.



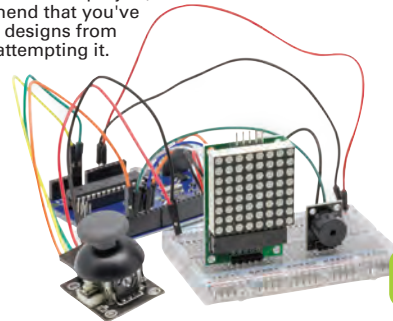
Finished Project

See step-by-step instructions at:  
[jaycar.com.au/attiny-programmer](http://jaycar.com.au/attiny-programmer)



### Make Your Own: XC-3900 Mini Project – Snake Game

Here's the first of our mini projects that you can build from parts in the XC-3900 kit. It's a take on the old 'Snake' game that you might have seen on old Nokia phones or even earlier on Atari. There's nothing difficult about this project, but we'd recommend that you've built a few of the designs from the book before attempting it.



Finished Project

See step-by-step instructions at:  
[jaycar.com.au/snake-game](http://jaycar.com.au/snake-game)



### Make Your Own: Arduino® Game Machine

We found a little game project online <http://gamebuino.com>, and with it being open-source, realised we could make our own version of it using duinotech parts. Even better, there's already a heap of games that have been created at <https://github.com/Rodot/Gamebuino-Games-Compilation>, and because it's based on Arduino, you can create your own games as well. There's a complete set

of libraries for making your own games at <https://github.com/Rodot/Gamebuino>, too. And just to make sure you've got something to get started with, we've built a Tic-Tac-Toe game for it too.

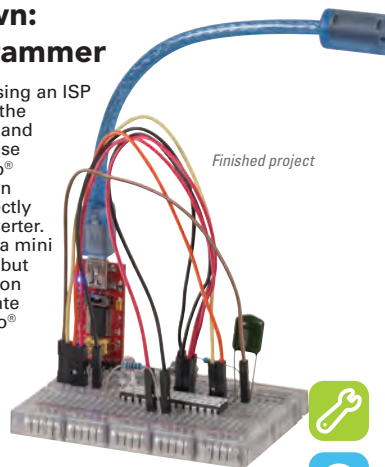
See step-by-step instructions at:  
[jaycar.com.au/game-machine](http://jaycar.com.au/game-machine)



## ▼ PROGRAMMING, WI-FI, LORA

### Make Your Own: ATmega Programmer

We previously covered using an ISP Programmer to program the ZZ-8727 ATmega 328P IC and 16MHz Crystal, but because it comes with the Arduino® bootloader installed, it can also be programmed directly with the USB-Serial Converter. We'll run through this as a mini project on a breadboard, but you could even lay it out on prototyping board to create your own custom Arduino® compatible board.



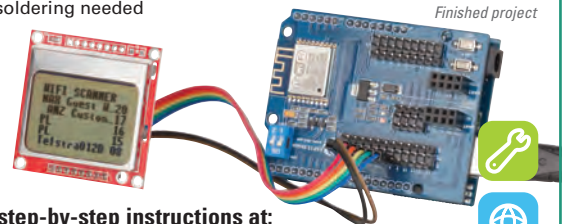
See step-by-step instructions at:  
[jaycar.com.au/usb-serial-converter](http://jaycar.com.au/usb-serial-converter)



### Make Your Own: Duinotech Wi-Fi Scanner

This is a simple tool using just four Duinotech parts that can sit on your workbench and quickly tell you what Wi-Fi networks are nearby and their relative strengths. If you're always working with different Wi-Fi networks like we are, or even have a few XC-4614's running in hotspot mode, it's handy to know which networks are up and which are not.

- Displays 5 most powerful Wi-Fi networks nearby
- Shows relative strength
- Automatic update every 5 seconds
- No soldering needed

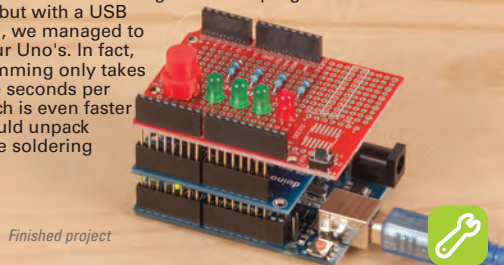


See step-by-step instructions at:  
[jaycar.com.au/diy-arduino-wifi-scanner](http://jaycar.com.au/diy-arduino-wifi-scanner)



### Make Your Own: Duinotech Uno Programmer

Recently, we had to program a big pile of Uno's for some workshops we were running, getting kids to build the Snake Game Project. We didn't want to worry the kids with the programming side of it, so we needed a pile of preprogrammed Uno's for them to build with. The idea of using an Uno to program an Uno sounds a bit meta, but with a USB Host Shield, we managed to program our Uno's. In fact, the programming only takes about three seconds per board, which is even faster than we could unpack them. Some soldering required.

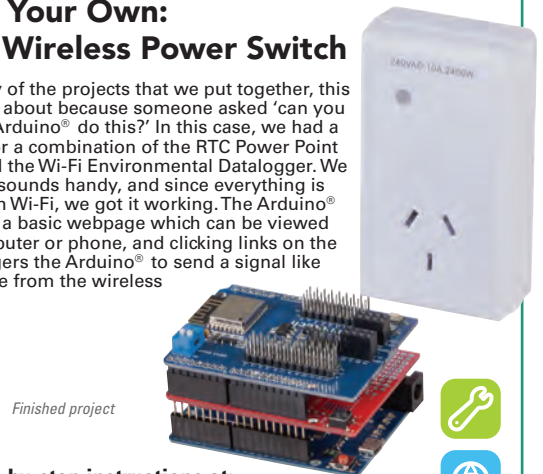


See step-by-step instructions at:  
[jaycar.com.au/uno-programmer](http://jaycar.com.au/uno-programmer)



### Make Your Own: Wi-Fi Wireless Power Switch

Like many of the projects that we put together, this one came about because someone asked 'can you make an Arduino® do this?' In this case, we had a request for a combination of the RTC Power Point Timer and the Wi-Fi Environmental Datalogger. We figured it sounds handy, and since everything is better with Wi-Fi, we got it working. The Arduino® serves up a basic webpage which can be viewed on a computer or phone, and clicking links on the page triggers the Arduino® to send a signal like the remote from the wireless remote.



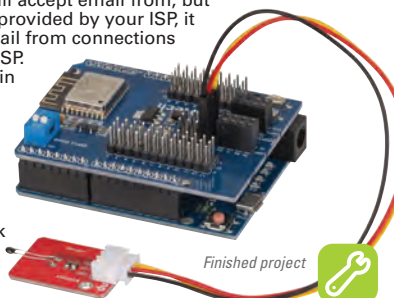
See step-by-step instructions at:  
[jaycar.com.au/wi-fi-power-switch](http://jaycar.com.au/wi-fi-power-switch)



### Make Your Own: Wi-Fi Email Notifier

This project was inspired by one of my colleagues who wanted to be notified if his server room got too hot, but you could easily change the trigger to some other form of input, or even to simply report some data back to you at a regular rate.

The first thing you'll need to check is whether this project will work with your Wi-Fi network and email address. Most email servers are fussy about who they will accept email from, but if your email address is provided by your ISP, it will generally accept email from connections coming in through that ISP. For example, I have Virgin Mobile Broadband, and the virginbroadband.com.au email server is happy to receive emails while I'm connected to Virgin Mobile Broadband. If you aren't sure, you can even check this with a computer before buying the components.

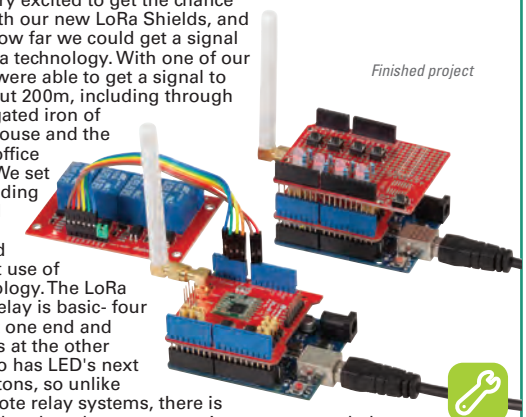


See step-by-step instructions at:  
[jaycar.com.au/wifi-notifier](http://jaycar.com.au/wifi-notifier)



### Make Your Own: LoRa Remote Relay

We are very excited to get the chance to play with our new LoRa Shields, and test just how far we could get a signal using LoRa technology. With one of our tests, we were able to get a signal to travel about 200m, including through the corrugated iron of the warehouse and the concrete office building. We set about building a practical project that would make best use of the technology. The LoRa Remote Relay is basic-four buttons at one end and four relays at the other end. It also has LED's next to the buttons, so unlike other remote relay systems, there is feedback that the relays are operating as commanded.



See step-by-step instructions at:  
[jaycar.com.au/lora-remote](http://jaycar.com.au/lora-remote)





## AV & COMMS

### Make Your Own: Duinotech Metronome

We usually think of soldering irons, pliers and oscilloscopes when we think of electronic tools, and while this project may not be useful to the electronics enthusiast, we think it's a good way of showing how Arduino® based tools can be useful in other fields- in this case for musicians. The Duinotech Metronome has adjustable tempo between 20 and 240bpm, and can be set to accent anywhere between every beat and every eighth beat. It also gives a display of the classical name for that tempo.



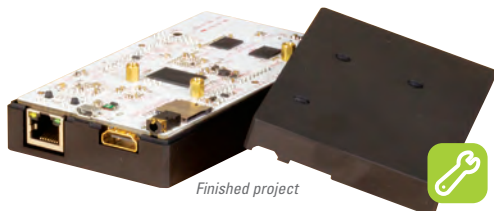
Finished project

See step-by-step instructions at:  
[jaycar.com.au/metronome](http://jaycar.com.au/metronome)



### Make Your Own: pcDuino Media Player

Create an affordable and functional Media Player using a pcDuino single board computer. We'll show you how to put together a flexible Media Player that can plug straight into your HDMITV. It can also be upgraded with heaps of open source software options available.



See step-by-step instructions at:  
[jaycar.com.au/pcduino-media-player](http://jaycar.com.au/pcduino-media-player)



### Make Your Own: Duinotech FM Radio

Some of the Arduino® compatible modules boast amazing functionality, such as the FM Radio Module used in this project. We've had the FM Radio Module for a while now, and it was only inevitable that someone would say 'Why don't you make an FM radio project?'. Here it is, using a Leonardo main board, one of our new XC-4629 colour LCD displays to show status information, and a pair of tactile switches for controls.



Finished Project

See step-by-step instructions at:  
[jaycar.com.au/duinotech-fm-radio](http://jaycar.com.au/duinotech-fm-radio)



### Make Your Own: Programmable Remote Control

One of the really great things about the Arduino® community is how many extra features they have added to the IDE. In this project, we'll be using a library which has been created by one of the members of the Arduino® community, and has been added to by other members. It's a Programmable Remote Control, which is perhaps similar to a 'Learning Remote Control', except that it can give a lot more information about the codes it is sending. Check out the library documentation for the protocols that are supported. Some soldering required!

Finished project



You'll also need some offcuts of wire to build the project- we used some coloured ribbon cable offcuts to help identify which wire is which.

See step-by-step instructions at:  
[jaycar.com.au/prog-remote-control](http://jaycar.com.au/prog-remote-control)



### Make Your Own: Android Phone Notifier

You might be surprised to find how easy it is to control an Android phone with an Arduino. We're using a Leonardo board to emulate a keyboard, and use this to send commands to the phone. In this project, we've hooked up an Ultrasonic Sensor Module as the trigger, and then commanding the phone to send a text message with the distance measured if something is detected too close, but like any Arduino® project, you can customize it as much as you like.

Finished project



See step-by-step instructions at:  
[jaycar.com.au/android-phone-notifier](http://jaycar.com.au/android-phone-notifier)



### Make Your Own: Arduino® Phone

Here's a novel and practical project that brings a touch of the '90's using 21st century technology. It's a phone that looks and behaves like an old touch-tone phone, but at its heart has a GSM shield and Arduino® Uno. It's not an easy build- there's soldering and you might even need to modify the GSM shield. And the case has been 3d printed, so you might need to look at other build options if you don't have access to a 3d printer. Perhaps you have an old phone lying around?

Finished project



See step-by-step instructions at:  
[jaycar.com.au/diy-arduino-phone](http://jaycar.com.au/diy-arduino-phone)



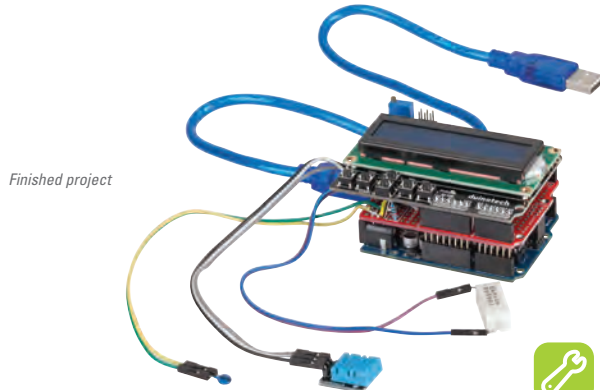
## ▼ MONITORING

### Make Your Own: Telescope Dew Heater

This project brings together a few Duinotech Modules and some other parts to create a versatile tool. Inspired by the Dew Heaters used on telescopes, it senses ambient temperature and humidity to control a small heater. Not just for telescopes, but anything that needs to avoid condensation.

**Features include:**

- Programmable temperature setpoint
- Temperature target can be set above ambient or dewpoint
- Settings can be saved to EEPROM
- Adjustable failsafe heater output to use if sensors are faulty
- Comprehensive LCD info screen

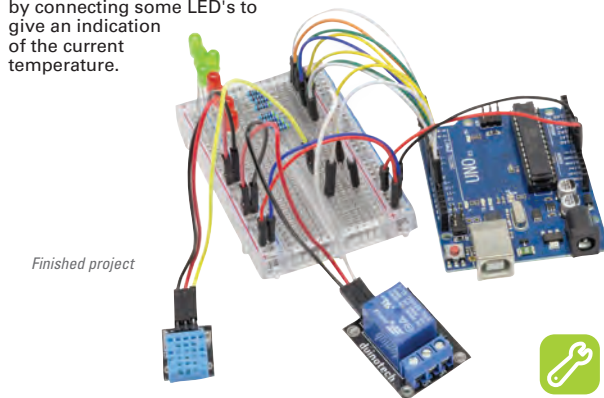


See step-by-step instructions at:  
[jaycar.com.au/diy-telescope-dew-heater](http://jaycar.com.au/diy-telescope-dew-heater)



### Make Your Own: Duinotech Thermostat

Here's a project that will take you into the world beyond the basics of the Duinotech Learning Kit. We're going to build a project that shows how we can use the Learning Kit with other modules, and also how to incorporate an external library to extend our programming possibilities. It's a thermostat, which is nothing more than a relay which responds to temperature. We've added some colour to it by connecting some LED's to give an indication of the current temperature.



See step-by-step instructions at:  
[jaycar.com.au/arduino-thermostat](http://jaycar.com.au/arduino-thermostat)



### Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck\*.

\*Conditions apply – see page 526 For details

### Make Your Own: Secret Knock Detector

We saw this project on Instructables, and had to try it for ourselves. Of course, we ended up using all the Duinotech parts we had around. It uses a piezo transducer as a microphone to detect knocking, and then activates a relay if the correct knock sequence is detected. The original project was designed to unlock a door, but our version has a relay output which you could use for just about anything.

*You'll need to visit the Instructables page and download the sketch file - we can't post it here because of copyright.*



See step-by-step instructions at:  
[jaycar.com.au/diy-secret-knock-detector](http://jaycar.com.au/diy-secret-knock-detector)



### Make Your Own: Trailer Voltage Monitor

One of the guys at the office here asked if I could build an Arduino® device for monitoring the voltage of the 12V battery in his trailer- as now required for registration of some trailers which have electric brakes. Here's what we built- and it's a bit cheaper than some of the offerings out there.

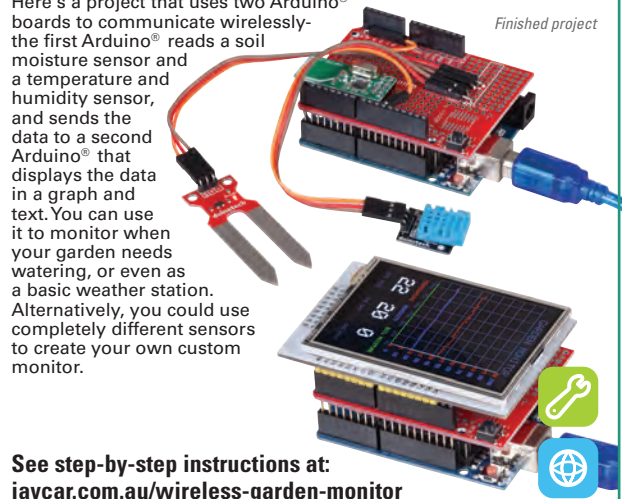


See step-by-step instructions at:  
[jaycar.com.au/trailervoltagemonitor](http://jaycar.com.au/trailervoltagemonitor)



### Make Your Own: Wireless Garden Monitor

Here's a project that uses two Arduino® boards to communicate wirelessly- the first Arduino® reads a soil moisture sensor and a temperature and humidity sensor, and sends the data to a second Arduino® that displays the data in a graph and text. You can use it to monitor when your garden needs watering, or even as a basic weather station. Alternatively, you could use completely different sensors to create your own custom monitor.



See step-by-step instructions at:  
[jaycar.com.au/wireless-garden-monitor](http://jaycar.com.au/wireless-garden-monitor)

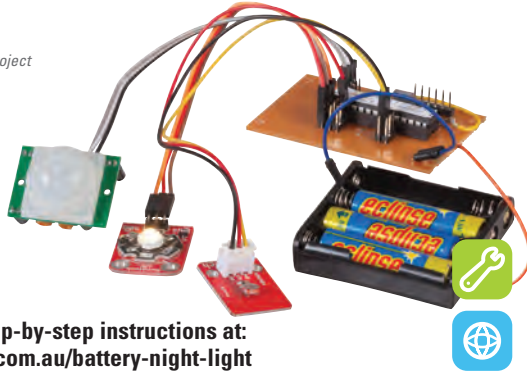


## ▼ NIGHT LIGHT

### Make Your Own: Battery Night Light

A motion activated nightlight, that only comes on when it's dark. The standby current is less than a milliamp, which will be enough to run it for months. There is some soldering required, as we are pretty much going to build our own Arduino® compatible board.

Finished project



See step-by-step instructions at:  
[jaycar.com.au/battery-night-light](http://jaycar.com.au/battery-night-light)



### Make Your Own: Arduino® RFID Keypad

Here's a security project designed with versatility in mind- it's inspired by our LA-5353 RFID Keypad, but because it uses the XC-4630 LCD Touchscreen, the setup of cards and users is a bit easier. As with most Arduino® security stuff, it's pretty easy to bypass if you have physical access to the main board, so we wouldn't recommend using it for protecting valuables. Still, if you want to be able to activate a relay with either a card (most smartcards like public transport cards and bank cards will work with it) or a PIN code, this project fits the bill. There is some soldering required for this project.



Finished project

See step-by-step instructions at:  
[jaycar.com.au/rfid-keypad](http://jaycar.com.au/rfid-keypad)

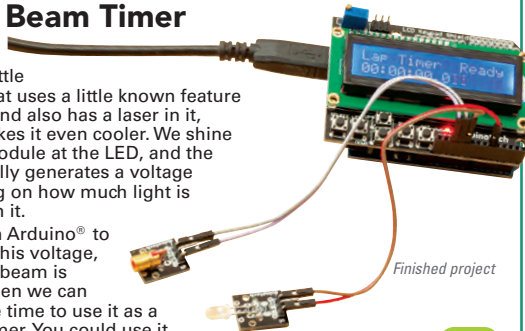


### Make Your Own: Laser Beam Timer

Here's a handy little project that uses a little known feature of LEDs, and also has a laser in it, which makes it even cooler. We shine a Laser Module at the LED, and the LED actually generates a voltage depending on how much light is shining on it.

We use an Arduino® to measure this voltage, and if the beam is broken, then we can record the time to use it as a precise timer. You could use it like a race lap timer (for slot cars!), or to measure the speed of falling objects. Some soldering is required.

See step-by-step instructions at:  
[jaycar.com.au/laser-beam-timer](http://jaycar.com.au/laser-beam-timer)



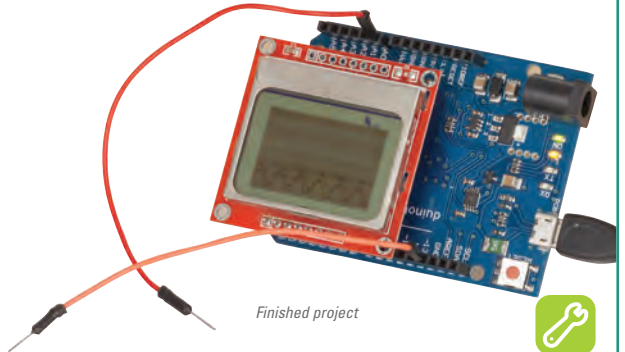
Finished project



## ▼ TESTERS

### Make Your Own: Simple Duinotech Oscilloscope

This little test tool is designed to be easily put together if you need a very basic 'scope in a hurry. There's no high end specs here- the maximum sample rate is about 700 samples per second, and it's limited to the 0-5V that the Arduino® analog pins can handle. Still, it's sensitive enough to pick up the 50Hz noise from mains wiring without making contact. Also includes a tone generator, so you can compare signal frequencies too.



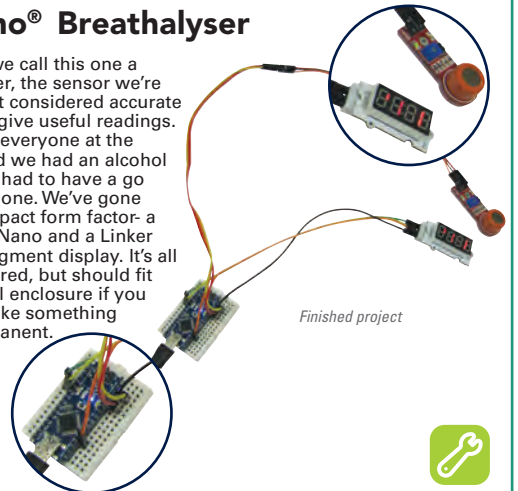
Finished project

See step-by-step instructions at:  
[jaycar.com.au/oscilloscope](http://jaycar.com.au/oscilloscope)



### Make Your Own: Arduino® Breathalyser

Although we call this one a breathalyser, the sensor we're using is not considered accurate enough to give useful readings. Still, when everyone at the office heard we had an alcohol sensor, we had to have a go at building one. We've gone with a compact form factor- a Duinotech Nano and a Linker 4-digit 7-segment display. It's all just free-wired, but should fit into a small enclosure if you want to make something more permanent.



Finished project

See step-by-step instructions at:  
[jaycar.com.au/diy-arduino-breathalyser](http://jaycar.com.au/diy-arduino-breathalyser)



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## Electronics Kits & Projects:

There has been an exciting development this year in the world of kits & projects. A new electronics hobby magazine called *DIYODE* has been launched (see page 61 for details). Whilst the mag is brand new, we are already supporting it with a logic project kit and a motor speed controller kit, both of these can be found on page 63.

We are still supporting the venerable *Silicon Chip* magazine with kits for their projects. Check the following pages for more news in that regards.

**BACK CATALOGUE:** We have also continued to expand our back catalogue of kits that we still have stock of at the Head Office but do not carry in stores. If you are looking for a kit of an old project, check our the information spread through the kit section to help find the project you are looking for. More info on page 64.

## A Guide to Kit Icons:



**SIMPLE** - These kits are straightforward to assemble, generally built in one session and will require some basic electronics knowledge and soldering skills. Most are battery or AC adaptor powered. They may not have enclosures (i.e. "boxes") or front panels.



**DETAILED** - Similar to the above but basically bigger. They are either "short forms" of larger projects or are fully operational projects with enclosures, front panels, etc. A greater knowledge of electronics is required to understand their operation and "troubleshoot" if necessary.



**COMPLEX** - All big projects which by their nature are complex, require several sittings to complete and may require some mechanical assembly. A good knowledge of electronics and manual dexterity is necessary to ensure success.



**240V POWERED** - All mains kits have this logo. We do this because we feel it is necessary that only experienced kit constructors should attempt mains powered projects. It is generally a good idea to have a competent colleague check your work before applying power.



**BATTERY INCLUDED** - Batteries are included with the kit.



**AUTOMOTIVE KIT** - Kit is specifically designed for automotive (which could mean motorcycle, caravan or boat as well).



**BUILD TIME** - We understand that your time is valuable. We have therefore decided to provide you with an estimated build time for all our kits. Each kit includes a stopwatch logo that indicates construction time. We know that you will find this useful.



**KWIK KIT** - A low cost fast assembly range of kits. Kwik kits are a fully imported range that can be assembled in just one sitting, sometimes only minutes! All printed circuit boards are screened with a component overlay. The instructions assume component knowledge & the ability to follow simple schematic diagrams



**SMD COMPONENT** - Kit involves soldering a SMD (Surface Mount Device). Suitable soldering iron for SMD soldering and proper handling techniques are required.



**SMD COMPONENT - PRE SOLDERED** - Kit supplied with surface mount component already soldered onto the PCB

### NAVIGATION:

<b>Audio / Video Kits</b>	<b>59</b>
<b>Automotive / Marine Kits</b>	<b>62</b>
<b>Household Kits</b>	<b>61</b>
<b>Power Kits</b>	<b>63</b>
<b>Sci-Fi Kits</b>	<b>63</b>
<b>Test Equipment Kits</b>	<b>63</b>

### Guarantee on Kits

Most kits are successfully constructed with few problems. However, we recommend that if a kit builder does not have enough knowledge to diagnose faults, that the project should not be started unless assistance can be obtained. Unfortunately, one small faulty solder joint or wiring mistake can prevent a project from operating, which would take hours to locate and at normal service rates the service charge could well be more than the total cost of the kit. If you believe that you may have difficulty in building a kit (which is simply a complete set of separate parts made up to a list provided by the major electronics magazines) and you cannot get assistance from a friend, we suggest you return the kit to us in its original condition for a refund under our satisfaction guarantee. Unfortunately, kits cannot be replaced under our satisfaction guarantee once construction has been commenced. However, should you find any faulty parts (only), we will gladly replace them under warranty.

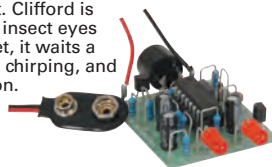
### ▼ AUDIO EFFECTS KITS

#### CLIFFORD THE CRICKET

Refer: *Silicon Chip Magazine* Dec 1994

Clifford hides in the dark and chirps annoyingly until a light is turned on - just like a real cricket. Clifford is created on a small PCB and has little LED insect eyes that flash as it sings. Just like a real cricket, it waits a few seconds after darkness until it begins chirping, and stops instantly when a light comes back on.

- PCB, piezo buzzer, LDR plus all electronic components supplied
- PCB: 41 x 36mm



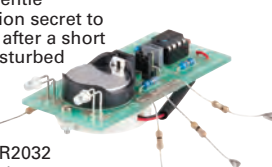
	CAT.	Qty 1+	Qty 5+
Kit	KC-5178	\$17.95	\$15.95

#### CRAZY CRICKET & FREAKY FROG

Refer: *Silicon Chip Magazine* June 2012

A fun first project for a budding electronics enthusiast. Designed to imitate the chirping noise of a cricket or gentle croaking of a frog, while keeping its location secret to annoy other family members. It activates after a short time delay in darkness and stops when disturbed by light. Both the cricket and frog modes are preprogrammed in the IC. Each time you turn it on, the alternating program runs. Kit supplied with silk screened PCB, pre-programmed PIC IC, CR2032 button cell battery & electronic components.

- PCB dimensions: 30 x 65mm



	CAT.	Qty 1+	Qty 5+
Kit	KC-5510	\$22.95	\$20.35

#### THEREMIN SYNTHESISER KIT MKIII

Refer: *Silicon Chip Magazine* Jan 2018

Originally invented in 1919 using valve technology, and as featured on the soundtrack for the 1951 film "The Day the Earth Stood Still", the all "new" completely transistorised Theremin will give you a truly retro sound.

This kit is easy to build with everything incorporated into one circuit board. Also, most components, the switch, the pot and the power socket are mounted on the circuit board to eliminate messy wiring; the use of on board voltage regulation to suit an AC power supply eliminates the noise that results from modern switch mode power supplies; and it can also be powered by an external 12 volt battery.

We'll be honest, it is tricky to play and generally suits someone experienced with string instruments like a violin (Leon Theremin himself was a cello player), but with a little practice you can play some basic tunes, or just use it to make eerie sci-fi sound effects.



	CAT.	Qty 1+	Qty 5+
Kit	KC-5537	\$99.95	\$89.95

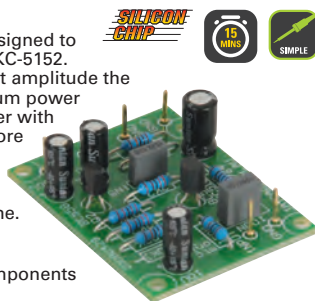
## AMPLIFIER & PREAMPLIFIER KITS

### "PRE-CHAMP" VERSATILE PREAMPLIFIER

Refer: Silicon Chip Magazine July 1994

This tiny preamp was specifically designed to be used with the 'Champ' amplifier KC-5152. Unless you have a signal of sufficient amplitude the 'Champ' will not produce its maximum power output. The 'Pre-Champ' is the answer with a gain in excess of 40dB, which is more than enough for most applications. You can vary the gain by changing a resistor and there is even provision on the PCB for an electret microphone. Use AM-4010.

- Power requirement 6-12VDC
- Kit includes PCB and electronic components
- Can be battery powered



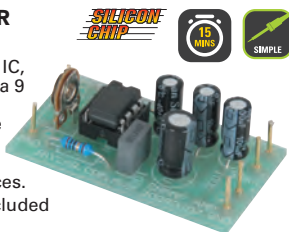
	CAT.	Qty 1+	Qty 5+
Kit	KC-5166	\$9.95	\$8.75
Microphone To Suit	AM-4010	\$2.35	
Recommended Box - UB5	HB-6015	\$2.95	

### "THE CHAMP" AUDIO AMPLIFIER

Refer: Silicon Chip Magazine February 1994

This tiny module uses the LM386 audio IC, and will deliver 0.5W into 8 ohms from a 9 volt supply making it ideal for all those basic audio projects. It features variable gain, will happily run from 4-12VDC and is smaller than a 9 volt battery, allowing it to fit into the tightest of spaces.

- PCB and all electronic components included
- PCB: 46 x 26mm



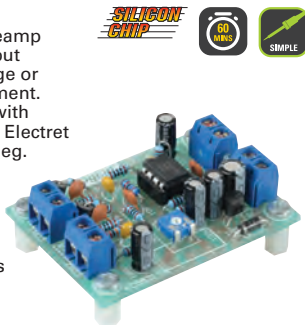
	CAT.	Qty 1+	Qty 5+
Kit	KC-5152	\$9.95	\$8.75
Recommended Box - UB5	HB-6015	\$2.95	

### CHAMPION STEREO/DUAL CHANNEL PREAMPLIFIER KIT

Refer: Silicon Chip Magazine June 2015

Use it as a general purpose stereo preamp or as a dual channel preamp. High input impedance for ceramic phono cartridge or piezoelectric pickup in musical instrument. Can be configured as single channel with fixed or variable gain, and works with Electret microphones. Powered from 6-9VDC (eg. 9V battery) or 12-20VDC. Kit supplied with PCB and on-board electronic components for 12-20VDC operation (Electret mic not included, use AM-4010). For 6-9VDC operation an LP2950-05 5V low dropout regulator is required (use ZV-1645).

- PCB: 57 x 41mm



	CAT.	Qty 1+	Qty 5+
Kit	KC-5531	\$16.95	\$14.95

## ELECTRONICS MAGAZINE

### GET YOUR SILICON CHIP AT JAYCAR

Silicon Chip is Australia's leading magazine for the electronics enthusiast. As well as a great range of fun DIY kits, SILICON CHIP has interesting features articles and popular columns such as "Serviceman's Log" and "Circuit Notebook" etc. Jaycar gets its stock of SILICON CHIP straight off the printing press, so we usually have it a couple of days earlier than the newsagents. Don't forget to call in to a Jaycar store for the latest issue hot off the press.



	CAT.	Qty 1+
	BE-5025	\$9.95

### 'THE CHAMPION' AUDIO AMPLIFIER KIT WITH PRE-AMPLIFIER

Refer: Silicon Chip Magazine January 2013

An amplifier and pre-amplifier combination for all those general-purpose audio projects. It uses the AN7511 audio IC to deliver 2W music power into 8 ohms from a 9 to 12V supply. Features low distortion, two inputs (mixed 1:1), over-temperature protection (auto-limiting), mute and standby control. Pre-amplifier is also suitable for microphones and electric guitars, and can be separated from the amplifier for individual use. Kit supplied with silk-screened PCB, heatsink and PCB mount components.

Note: Optional 10k ohm potentiometer for external volume control use RP-7610



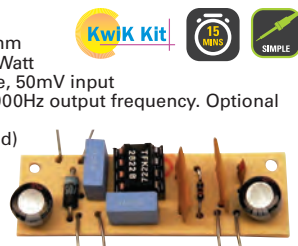
SPECIFICATIONS	KC-5519
Operating Voltage Range	4 - 13.5VDC
Output Power	up to 4W
Music Power	3W @ 9 - 12V
Signal-To-Noise Ratio	65dB
Frequency Response	-2.5dB @ 20Hz, -0.2dB @ 20kHz
Thd+N	1kHz: 0.25%
Gain	34dB for Amplifier, up to 58dB with pre-amplifier
Input Sensitivity For Amp Only	52mV RMS @ 5V, 125mV RMS @ 9 - 12V
Input Sensitivity For Amp & Pre-Amp	2mV RMS @ 5V, 5mV RMS @ 9 - 12V
Quiescent Current	2mA (Pre-amplifier) + 30-60mA (Amplifier)
Standby Current	2mA (Pre-amplifier) + 1-10uA (Amplifier)
PCB	101x41mm

	CAT.	Qty 1+	Qty 5+
Kit	KC-5519	\$22.95	\$20.35

### 1 WATT AUDIO AMPLIFIER

This tiny PCB measuring only 28 x 28mm incorporates all the electronics for a 1 Watt amplifier. 4 to 12VDC operating voltage, 50mV input sensitivity, 8 ohm output and 20 to 25000Hz output frequency. Optional connection for a 10k ohm - 100k ohm logarithmic potentiometer (not included) for adjustable volume control.

- PCB and components
- 9VDC (use MP-3146)
- PCB: 41 x 24mm



	CAT.	Qty 1+	Qty 5+
Kit	KG-9032	\$9.95	\$8.75
9Vdc Plugpack To Suit	MP-3146	\$17.95	

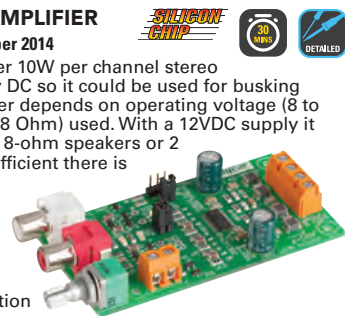
### MINI-D 2 X 10W CLASS-D AMPLIFIER

Refer: Silicon Chip Magazine September 2014

This compact amplifier can deliver 10W per channel stereo or 30W mono, and is powered by DC so it could be used for busking running of a battery. Output power depends on operating voltage (8 to 25VDC) speaker impedance (4 to 8 Ohm) used. With a 12VDC supply it can deliver 7.5W per channel into 8-ohm speakers or 2 x 15W into 4-ohm loads. Highly efficient there is no need for a heatsink!

- Up to 91% efficient
- Selectable gain
- On-board volume control
- Low-power shutdown mode
- Over-temperature, over-current, short circuit and speaker protection
- PCB: 85 x 46mm

Supplied with double sided, solder-masked screen-printed PCB, & ALL SMD components pre-soldered to the PCB to save you soldering them yourself.



	CAT.	Qty 1+	Qty 5+
Kit	KC-5530	\$49.95	\$44.90



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!

## AUDIO KITS

### THE SUPER EAR

Refer: Electronics Australia May 1998

This kit assists people who have difficulty in hearing high audio frequencies, or for those who want to hear more than their normal unaided ear. By amplifying these high audio frequencies, not only will conversations be made clearer, you will be able to hear noises not normally heard such as insects or a watch ticking, for example. Built into a small case and powered from a 9V battery makes this kit totally portable. Use it as a hearing aid or for a fun & educational purpose.

- Kit supplied with case, machined panel, PCB, 9V battery, and all electronic components
- Headphones required
- PCB: 56 x 26mm

Note: Not a replacement for a proper hearing aid.



	CAT.	Qty 1+	Qty 5+
Kit	KA-1809	\$29.95	\$26.90

## AV KITS - RADIO & FM KITS

### CRYSTAL RADIO

A radio without batteries!

Enjoy AM broadcasting without using battery or other power sources. Ideal for entry-level students or hobbyist with little electronics experience.

- Includes circuit explanation
- Kit supplied with screen printed PCB (81x53mm), germanium diode, pre-wound coil, earphone and all components
- PCB: 80 x 50mm



	CAT.	Qty 1+	Qty 5+
Kit	KV-3540	\$19.95	\$17.95

### MINIATURE FM TRANSMITTER

Refer: Electronics Today International December 1985

This unit is a two transistor two stage transmitter that has the benefits of being VERY COMPACT. The kit contains PCB, 9V battery and all components, and makes an ideal inexpensive beginners kit.

- PCB: 45 x 23mm



	CAT.	Qty 1+	Qty 5+
Kit	KE-4711	\$14.95	\$13.45
Recommended Box - UB5	HB-6015	\$2.95	

## ELECTRONICS MAGAZINE

### DIYODE MONTHLY MAGAZINE

Get your DIYODE magazine at Jaycar! DIYODE Magazine is a 100% Australian-made, independent publication produced monthly. The magazine's fundamental focus is to provide a valid platform to showcase the amazing creations and the hard work undertaken by the electronics and maker communities, to solve problems or to just make really awesome things! Jaycar gets its stock of DIYODE magazine straight off the printing press, so we usually have it a couple of days earlier than the newsagents. Don't forget to call into a Jaycar store for the latest issue hot off the press. For more information about the magazine visit: [www.diyodemag.com](http://www.diyodemag.com)

But wait, there's more! Every print magazine purchase includes access to a FREE digital edition on the diyodemag.com website.



	CAT.	Qty 1+
	BE-5030	\$9.95

## HOUSEHOLD KITS

### LIQUID LEVEL SENSOR

When two contacts are shorted by liquid, an LED will illuminate. Use in applications such as an overflow alarm and rain detector. Connect Relay Card KG-9142 for a relay output to operate lights, sirens or other warning devices.

- Project requires 9VDC
- Kit supplied with Kwik Kit PCB and all electronic components
- PCB: 45 x 15mm



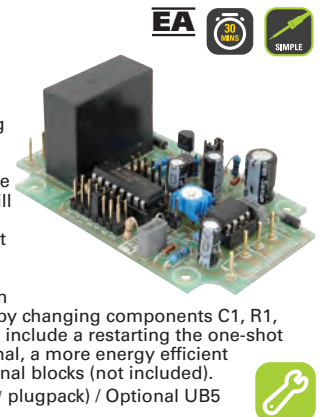
	CAT.	Qty 1+	Qty 5+
Kit	KG-9138	\$9.95	\$8.75
Recommended Box - UB5	HB-6015	\$2.95	

### THE 'FLEXITIMER'

Refer: Electronics Australia March 1991

Now in it's third revision by Jaycar, the Flexitimer uses a 555 timer coupled with a binary counter to create a simple and consistent timing circuit. In the original one-shot mode the timer will count up to the set point and switch the relay once. In the additional interval mode the timer will continue switching the relay at each recurrence of the set point. The circuit can be set at 11 time points with the minimum being 7 seconds and each step doubling the time to a maximum of 2 hours. Other times are possible by changing components C1, R1, and R2. Features of the third revision include a restarting the one-shot mode from an external switch or signal, a more energy efficient design, & space on the PCB for terminal blocks (not included).

- Requires 12- 15V DC (use CAT. MP-3147 plugpack) / Optional UB5 case (HB-6015)
- PCB Dimensions: 74 x 47mm



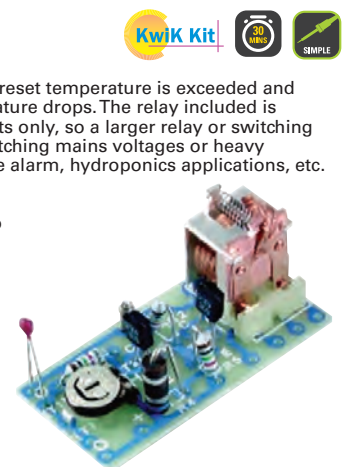
	CAT.	Qty 1+	Qty 5+
Kit	KA-1732	\$22.95	\$20.35
12VDC Plugpack To Suit	MP-3147	\$17.95	
Recommended Box - UB3	HB-6013	\$3.95	

### TEMPERATURE SWITCH

Ideal for turning fans or heaters on at certain temperatures.

This kit operates a relay when a preset temperature is exceeded and drops-out the relay when temperature drops. The relay included is capable of switching small currents only, so a larger relay or switching device should be employed if switching mains voltages or heavy currents. Ideal as a thermostat, ice alarm, hydroponics applications, etc. A small trimpot is used to adjust the cutout temperatures for the relay in the range of approx -30 to +150° C.

- PCB NTC thermocouple and components
- 12VDC, 100mA
- PCB: 56 x 28mm



	CAT.	Qty 1+	Qty 5+
Kit	KG-9140	\$24.95	\$22.35
12VDC plugpack to suit	MP-3147	\$17.95	
Recommended Box - UB5	HB-6015	\$2.95	

### Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

Catalogue Department - Jaycar Electronics:  
[catalogue@jaycar.com](mailto:catalogue@jaycar.com)





## AUTOMOTIVE KITS

### 10A 12VDC MOTOR SPEED CONTROLLER

Refer: Silicon Chip Magazine June, 1997

Use this kit for controlling 12V DC motors in cars such as fuel injection pumps, water/air inter-coolers and water injection on performance cars. You can also use it for headlight dimming and for running 12V DC motors in 24V vehicles. The circuit incorporates a soft start feature, which is used to reduce inrush currents, particularly if the kit is to control 12V incandescent lamps. As presented, the kit will control loads up to 10 amps, although the addition of an extra MOSFET transistor will double that capacity to an amazing 20 amps.

- Kit includes PCB plus all electronic components to build the 10A version
- Extra MOSFET available separately, ZT-2450
- PCB: 69 x 51mm



	CAT.	Qty 1+	Qty 5+
Kit	KC-5225	\$27.95	\$24.95
Optional MOSFET To Suit	ZT-2450	\$9.95	
Recommended Box - UB3	HB-6013	\$3.95	

### QUICKBRAKE BRAKE LIGHT WARNING KIT

Refer: Silicon Chip Magazine January 2016

Over one quarter of vehicle accidents in the Sydney area are of the rear-end variety. The Quickbrake reduces this risk by detecting when your foot quickly lifts off the accelerator pedal and activating your brake lights before your foot has even touched the brake pedal. This can increase apparent reaction time by up to 1 second, and at 100kph this equates to about 14 metres between you and the other car!

- Suitable for 12V vehicle systems
- Short form kit includes PCB and components only
- Requires wiring and UB3 enclosure
- PCB: 106.5 x 60mm



	CAT.	Qty 1+	Qty 5+
Kit	KC-5532	\$29.95	\$26.95

### CAR BATTERY MONITOR

Refer: Electronics Australia May 1987

Don't get caught with a flat battery! This simple electronic voltmeter lets you monitor the condition of your car's battery so you can act before getting stranded. 10 round 5mm LEDs tell you your battery's condition.

- Kit includes PC board and all components
- PCB: 62 x 39mm



	CAT.	Qty 1+	Qty 5+
Kit	KA-1683	\$19.95	\$17.70
Recommended Box - UB5	HB-6015	\$2.95	

## Automatic Account:

For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.

## EDUCATIONAL TOOLS

### KIT CONSTRUCTORS MANUAL

A must for amateur constructors. Contains much useful information for the more experienced. Huge amounts of information on construction and identification of parts.

- 8 pages



	CAT.	Qty 1+
	BI-8200	\$2.00

## AUTOMOTIVE/MARINE KITS

### ULTRASONIC ANTIFOULING KIT FOR BOATS

Refer: Silicon Chip Magazine May/June 2017

This is an improved design from our popular kit (KC-5498) from 2010 that helps reduce marine growth on the boat hull up to 8m. This new design has a second channel option (KC-5536) for larger boats up to 14m, soft-start feature, low current drain during shut-down and LED & Neon operation indicators.

- Suitable for boats up to 14m (up to 8m with one transducer).
- Ideal for boats with single-skin glass-reinforced plastic (GRP) or fibreglass, steel, aluminium or concrete hulls
- Powered by the boat's 12V battery
- Adjustable low-battery shut-down
- Very low current drain during shut-down
- Soft-start feature reduces surge current.
- LED indicators for power, low battery or fault
- Neon indicators for ultrasonic drive operation



Kit includes all specified parts to make a single channel version for boats up to 8m, including one transducer. SECOND CHANNEL: To make it into a Dual Channel purchase add-on Kit KC-5536 (Add-on Second Channel with Transducer)

### SECOND CHANNEL ADD-ON PACK FOR ULTRASONIC ANTIFOULING KIT FOR BOATS

Refer: Silicon Chip Magazine May/June 2017

This is the add-on kit to make the KC-5535 Ultrasonic Anti-Fouling Kit For Boats into a dual channel, so it can work on boats up to 14m. For more details see KC-5535. Kit includes all specified parts to make the second channel, including one transducer.

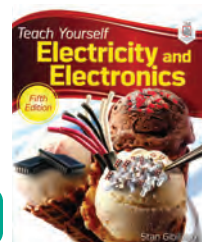
SPECIFICATIONS	BOTH
Operating Supply Voltage	11-16V DC
Average Current Drain	Typically 320mA for one transducer, 640mA for two transducers
Peak Current:	2A
Output Frequency Range	19.08kHz to 41.66kHz in 14 bands
Frequency Steps	12 steps in each band; 80Hz steps at 20kHz increasing to 344Hz steps at 40kHz
Signal Burst Period	1000 cycle bursts ~600ms at 20kHz and ~300ms at 40kHz
Burst Interval Period	Between 300ms and 600ms
Dual Transducer Drive	alternate
Transducer Drive Voltage	250VAC (about 700V peak-to-peak)
Low-Battery Cut-Out Threshold	Adjustable from 0-15V
Low-Battery Cut-In Threshold	0-2.5V above cut-out threshold
Low-Battery Shut-Down Quiescent Current	170uA
Power-Up Delay	30 seconds

	CAT.	Qty 1+	Qty 5+
Ultrasonic Antifouling Kit for Boats	KC-5535	\$249.00	\$219.00
Second Channel Add-on	KC-5536	\$169.00	\$151.95

### TEACH YOURSELF ELECTRICITY AND ELECTRONICS

Comprehensive, straightforward and well-written, this book covers everything from atomic structure to DC & AC theory, semi-conductors, integrated circuits, digital electronics & communications. Each chapter has a quiz at the end so you can test your knowledge. One of the best entry-level self-teaching textbooks on electronics we've ever seen.

- Softcover. 734 pages with illustrations
- 232 x 190mm



	CAT.	Qty 1+
	BM-7108	\$64.95

## POWER KITS

### 12VDC RELAY CARD

Add a relay output to your equipment.

This kit will close a relay's contacts with as little as 5mA to trigger the circuit. Literally any kit you see on these pages that uses an LED as a trip-condition indicator, can be used with this nifty project. Use the relay to sound buzzers, switch on lights, operate solenoids, trigger alarms, etc.

- Operation: common ground - output LED to ground
- Kit includes Kwik Kit PCB, relay plus electronic components
- PCB: 45 x 17mm



	CAT.	Qty 1+	Qty 5+
Kit	KG-9142	\$12.95	\$11.35

### LED BATTERY VOLTAGE INDICATOR

Refer: Electronics Australia Sept 1995

Quick battery condition indication.

This tiny circuit measures just 25mm x 25mm and will provide power indication and low voltage indication using a bi-colour LED, and can be used in just about any piece of battery operated equipment. The circuit is suitable for equipment powered from about 6-30VDC. With a simple circuit change, the bi-colour LED will produce a red glow to indicate that the voltage has EXCEEDED a preset value.

- PCB, bi-colour LED and components
- 6-10VDC 3-8mA
- PCB: 25 x 24mm



	CAT.	Qty 1+	Qty 5+
Kit	KA-1778	\$12.95	\$11.35
Recommended Box - UB5	HB-6015	\$2.95	

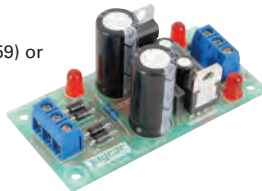
### UNIVERSAL +/- 15VDC 1A POWER SUPPLY REGULATOR

Refer: Silicon Chip Magazine March 2011

This is an upgraded version of the original universal power supply kit published in August 1988. One small board and a handful of parts will allow you to create either a regulated  $\pm 15V$  rail or  $+15VDC$  single voltage from a single winding or centre tap transformer (not included). Substitute different regulators to these supplied and you can alter the output voltage to your requirements. Upgrades in this design include improved parts layout and terminal blocks for inputs and outputs. Kit includes PCB and all components for 15 volt versions, transformer sold separately. PCB: 72 x 30mm

Power Supply Options:

- $\pm 15V$  rails from 15V AC plug pack (MP-3059) or transformer (MM-2002)
- $\pm 15V$  rails from 30V AC centre tapped transformer (MM-2007)
- $+15VDC$  from a single or centre tap transformer
- Different voltages using 78xx and 79xx series regulators (not included)



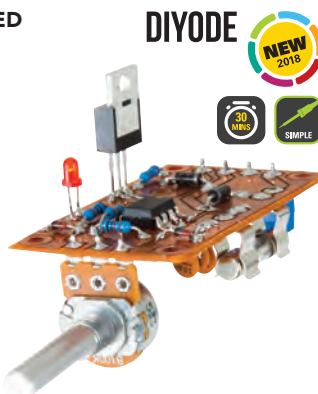
	CAT.	Qty 1+	Qty 5+
Kit	KC-5501	\$17.95	\$15.95
Transformer To Suit	MM-2002	\$11.95	
Transformer To Suit	MM-2007	\$8.95	
Plugpack To Suit	MP-3059	\$29.95	

### 5A 12VDC PWM MOTOR SPEED CONTROLLER KIT

Refer: DiYODE Magazine March 2018

This kit is a "bare bone" motor speed controller for fairly low current, low voltage applications. It is ideal, for example, to control small robotic motors or pump motors. It costs about one third of the more sophisticated PWM (Pulse-Width-Modulated) controller kits shown elsewhere in this section (although these kits are higher current capacity).

Note: image shown is DIYODE's prototype. The kit includes a solder-masked and silkscreened PCB.



	CAT.	Qty 1+	Qty 5+
Kit	KD-6102	\$14.95	\$13.45

## SCI-FI KITS

### JACOB'S LADDER MK3

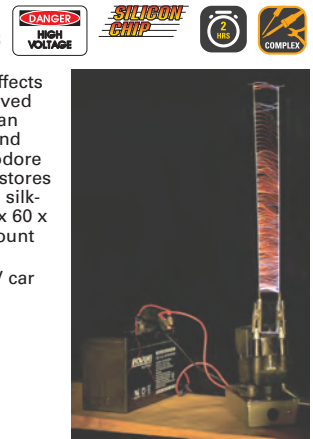
Refer: Silicon Chip Magazine February 2013

A spectacular rising ladder of bright and noisy sparks for theatre special effects or to impress your friends. This improved circuit has even more zing and zap than its previous design from April 2007 and requires the purchase of a VS Commodore 12V ignition coil (available from auto stores and parts recyclers). Kit supplied with silk-screened PCB, diecast enclosure (111 x 60 x 30mm), per-programmed PIC, PCB mount components and pre-cut wire/ladder.

- Powered from a 12V 7Ah SLA or 12V car battery

Note: Battery not included.

Warning: The Jacob's Ladder Kit uses potentially dangerous voltage.



	CAT.	Qty 1+	Qty 5+
Kit	KC-5520	\$69.95	\$62.95

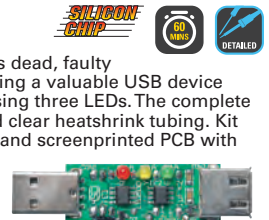
## TEST EQUIPMENT

### USB PORT VOLTAGE CHECKER

Refer: Silicon Chip Magazine July 2013

An easy way to test a USB port to see if it is dead, faulty or incorrectly wired to help prevent damaging a valuable USB device you plan to connect. Voltage is indicated using three LEDs. The complete project can be protected using the supplied clear heatshrink tubing. Kit supplied with double sided, soldermasked and screenprinted PCB with SMDs presoldered, clear heatshrink, USB connectors and components for USB 2.0 & USB 3.0.

- PCB: 44 x 17mm

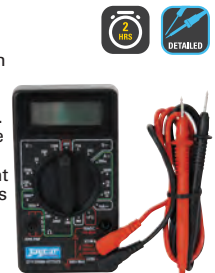


	CAT.	Qty 1+	Qty 5+
Kit	KC-5522	\$33.95	\$29.45

### DIGITAL MULTIMETER KIT

Learn everything there is to know about component recognition and basic electronics with this comprehensive kit. From test leads to solder, everything you need for the construction of this meter is included together with a detailed manual. With test questions and schematic supplied in the manual, the kit can be geared to an individual or class learning environment, making it an excellent choice for first year trade apprentices. Kit includes DMM case, LCD, solder, battery, test leads, PCB, comprehensive 18 page learning manual and electronic components.

- All you'll need is a soldering iron
- Meter dimensions: 67(W) x 123(H) x 5(D)mm



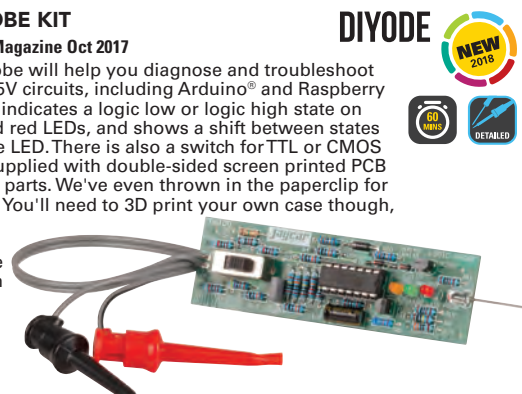
Obviously we have a HUGE range of ready to go DMMs in our Test Section on page 242

	CAT.	Qty 1+	Qty 5+
Kit	KG-9250	\$24.95	\$22.35

### LOGIC PROBE KIT

Refer: DiYODE Magazine Oct 2017

This logic probe will help you diagnose and troubleshoot your 3.3V or 5V circuits, including Arduino® and Raspberry Pi projects. It indicates a logic low or logic high state on the green and red LEDs, and shows a shift between states on the orange LED. There is also a switch for TTL or CMOS circuits. Kit supplied with double-sided screen printed PCB and specified parts. We've even thrown in the paperclip for the probe tip. You'll need to 3D print your own case though, for which you can download the print file from the DIYODE website.



	CAT.	Qty 1+	Qty 5+
Logic Probe Kit	KD-6100	\$14.95	\$13.45

## Can't find the kit you're looking for?

If you can't find what you're looking for, try the Jaycar Kit Back Catalogue. To keep up with the constant flow of new kits and maintain an up to date in-store line-up of projects, older and slow moving kits are returned to our central warehouse. We have included in this catalogue a number of the Kits that form our Back Catalogue. The range is divided up into sections shown at the bottom of the kit pages. In this listing is included a brief description, the reference magazine and issue date of the article, a catalogue reference number and a unit price. Issue is referenced by month then year (MM/YY). If the article ran over several months only the first month is referenced. For the absolutely latest list refer to our website [www.jaycar.com.au/kitbackcatalogue](http://www.jaycar.com.au/kitbackcatalogue). Back catalogue kits are not normally available in Jaycar Stores; you can ONLY access information about them on our website.

### THREE EASY WAYS TO ORDER THESE KITS:

1. Order online at [www.jaycar.com.au](http://www.jaycar.com.au)
2. Call our Free Call Order Hotline on 1800 022 888
3. Use the order form on page 525 and fax it to us

### MAGAZINE ICONS



Electronics  
Australia (EA)



Silicon Chip  
Magazine (SC)



Diyode  
Magazine



Range of easy to assemble kits  
(no articles available)(KK)



## KIT BACK CATALOGUES

### Audio<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
115WRMS/8Ω, 175WRMS Amp Module	SC	04/96	KC-5201	\$32.95
50W Mono Amplifier	SC	03/94	KC-5150	\$32.95
55V (+/-) Power Supply for KC-5514 Amp	SC	03/94	KC-5517	\$34.95
Bass Blazer Barograph Display	SC	02/01	KC-5305	\$34.95
CDROM Controller for Audio Playback	SC	12/07	KC-5459	\$39.95
DAB+/FM Digital Radio	SC	08/10	KC-5491	\$249.00
Digital Audio Delay	SC	12/11	KC-5506	\$69.95
High Power Class-D Amplifier	SC	11/12	KC-5514	\$89.95
MiniVOX Voice Operated Relay	SC	09/94	KC-5172	\$16.95
Power Supply to suit SC-480	SC	01/03	KC-5347	\$14.95
Stereo Compressor	SC	01/12	KC-5507	\$39.95
Studio 350 - High Power Amplifier	SC	01/04	KC-5372	\$119.00
Subwoofer Controller	SC	08/07	KC-5452	\$59.95
Universal Stereo Preamplifier	SC	04/94	KC-5159	\$18.95

†† Not available in stores.

### Audio / Radio / FM <sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
Composite AV Dist. Amplifier - Low Cost	SC	11/01	KC-5320	\$69.95
100-200MHz VHF Converter	Kwik Kit		KG-9128	\$19.95

†† Not available in stores.

### Audio Visual<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
Annunciator 75mm High Digits - 00 to 99	SC	12/05	KC-5420	\$39.95
AV Booster Kit	SC	04/03	KC-5350	\$69.95
AV Distribution Amplifier with S-Video	SC	11/01	KC-5321	\$79.95
Component Video RGB Converter	SC	05/04	KC-5388	\$49.95
RGB to Component Video Converter	SC	08/04	KC-5398	\$49.95
Video Enhancer & Y/C Separator	SC	08/04	KC-5394	\$99.95

†† Not available in stores.

### Find Out More In Store:

Our staff offer friendly and helpful service.  
We're here to help.

### Automotive<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
12V LED - PCB for Festoon 31mm (Interior Light)	SC	03/03	KC-5354	\$3.95
AV Booster/ Repeater Amplifier	SC	04/03	KC-5350	\$69.95
Capacitor Discharge Ignition	SC	05/08	KC-5466	\$24.95
Car Air Conditioner Controller	SC	01/07	KC-5437	\$24.95
Car Turbo Timer with Case - PIC Based	SC	08/07	KC-5451	\$29.95
Delta Throttle Timer	SC	Book	KC-5373	\$17.95
Digital Pulse Adjuster	SC	Book	KC-5384	\$49.95
Economy Adjustable Temp Switch	SC	Book	KC-5381	\$35.95
Engine Immobiliser MkII	SC	12/98	KC-5255	\$19.95
Frequency Switch	SC	Book	KC-5378	\$25.95
G-Force Meter	SC		KC-5504	\$34.95
GPS Data Logger / Tracker	SC	11/13	KC-5525	\$149.00
High Energy Ignition Kit for Cars	SC	11/12	KC-5513	\$55.00
Headlight Reminder for Cars	SC	08/01	KC-5317	\$27.95
Independent Electronic Boost Controller	SC	Book	KC-5387	\$49.95
Intelligent Turbo timer	SC	Book	KC-5383	\$29.95
LED Duty Cycle Meter for Fuel Injected Cars	SC	Book	KC-5375	\$37.95
Marine Engine Speed Equaliser	SC	11/09	KC-5488	\$27.95
Quick Brake - Emergency Light Trigger	SC	Book	KC-5373	\$17.95
Threshold Voltage Switch	SC	07/14	KC-5528	\$39.95
Universal Voltage Switch	SC	Book	KC-5377	\$24.95

†† Not available in stores.

### Computer<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
AVR Adaptor Board for KC-5340	SC	03/06	KC-5421	\$24.95
PC Infrared Transceiver Kit	SC	12/01	KC-5323	\$14.95
PC IR Remote Control	SC	08/03	KC-5366	\$29.95
PIC Programmer Checkerboard	SC	02/01	KC-5307	\$74.95
Serial Programmer for DSPIC30F PIC Controller	SC	05/08	KC-5467	\$39.95
SD/MMC Card Webserver In a Box	SC	11/09	KC-5489	\$74.95

†† Not available in stores.

### Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.



## ✓ KIT BACK CATALOGUES (CONTINUED)

### Household<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
433MHz Remote Switch	SC	01/09	KC-5473	\$47.95
Driveway Sentry	SC	11/04	KC-5402	\$99.95
Jacob's Ladder High Voltage Display Kit	SC	09/95	KC-5191	\$27.95
UHF Remote Controlled Main Switch	SC	02/08	KC-5462	\$99.95
V8 Sounding Doorbell - Short Form	SC	01/05	KC-5406	\$34.95
Water Tank Level Meter				
Telemetry Base Station	SC	01/08	KC-5461	\$39.95
Mains Timer Kit for Fans & Lights	SC	08/12	KC-5512	\$27.49
Universal Temperature Alarm Kit	SC	07/16	KC-5533	\$39.95

<sup>††</sup> Not available in stores.

### Find Out More In Store:

**Our staff offer friendly and helpful service.  
We're here to help.**

### Power<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
1.3 - 22VDC 1A Voltage Regulator	SC	05/07	KC-5446	\$19.95
3 / 5 / 6 / 12 / 15V 4A Improved Regulator	SC	05/08	KC-5463	\$19.95
12/24V 20A Motor Speed Controller	SC	06/11	KC-5502	\$43.95
12-48V 40A Motor Speed Controller	SC	01/17	KC-5534	\$129.00
240V 10A Deluxe Motor Speed Control	SC	05/09	KC-5478	\$119.00
240V 10A Motor Control with Soft Start	SC	02/14	KC-5526	\$159.00
Battery Saver for Lithium / SLA	SC	09/13	KC-5523	\$29.95
Battery Zapper MkII Add-on	SC	05/06	KC-5428	\$39.95
Bass Blazer Bar Graph Display	SC	02/01	KC-5305	\$34.95
DC Relay Switch	SC	11/06	KC-5434	\$19.95
Luxeon LED Star Module Driver	SC	05/04	KC-5389	\$19.95
12VDC Emergency Lighting Controller	SC	01/08	KC-5456	\$39.95
Basketball Scoreboard & Console - Wireless	SC	03/05	KC-5408	\$499.00
Basketball Scoreboard Extra Scoreboard - Wireless	SC	03/05	KC-5409	\$349.00

<sup>††</sup> Not available in stores.

### Sci-Fi<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
Raucous Alarm	SC	02/02	KC-5327	\$24.95
Jacob's Ladder High Voltage Display Mkl	SC	12/95	KC-5191	\$27.95
Starship Enterprise Door Sound Simulator	SC	05/06	KC-5423	\$27.95

<sup>††</sup> Not available in stores.

### Security<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
50 Metre IR Light Barrier	Kwik Kit		KG-9196	\$31.97
Alarm Raucous	SC	01/02	KC-5327	\$24.95
Annunciator Kit	SC	12/05	KC-5420	\$39.95
Driving Light Anti-Theft Kit	SC	09/02	KC-5337	\$19.95

<sup>††</sup> Not available in stores.

### Test Equipment<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
LED Duty Cycle Meter for Fuel Injected Cars	SC Book		KC-5375	\$37.95
Peak-Hold Injector Adaptor	SC Book		KC-5395	\$13.95
Transistor Tester	EA	09/83	KA-1119	\$29.95
Ultrasonic Water Tank Level Indicator	SC	09/11	KC-5503	\$49.95

<sup>††</sup> Not available in stores.

### Short Circuits 3<sup>††</sup>

DESCRIPTION	MAG	ISSUE	CAT.	Qty 1+
Short Circuits 3 #31 Computer Driven Display	SC3		KJ-8112	\$16.95

<sup>††</sup> Not available in stores.

### Smart Hardware Competition:

- KIM HORN, SHOPS AT JAYCAR CASTLE HILL

"Espresso Computer The system uses an Arduino to schedule turning an espresso machine on/off, and the grinding of coffee. A timetable can be set to control when the system turns on, e.g. 6:00am, Monday, 8:00am Saturday. It grinds the set number of cups, e.g. 3, and turns the machine on to warm up (about 15 minutes required). So when I come downstairs in the morning I have exactly the right amount of coffee ground and the machine is ready to go. After a set time the espresso machine turns off. The time per grind can be set for a cup as some beans require more time than others, and the coarseness of grind. The system can be used manually and you can dial up the number of cups to grind. So if you have 6 people over for dinner dial up 6. The number can be incremented and decremented while grinding. All the settings are set up using LED menu, and stored in the real time clock battery backed up memory. Hardware: Arduino uno, 2 relays, real time clock, 240V power supply, 16\*2 LED line display. Power on and grind/espresso relay on LEDs. 3 push button switches. In the process of adding wifi, esp8266, and web user interface. Also moving the LED and buttons to separate small hand held control."



## 3D Revolution:

3D printing really isn't brand new technology now. We've sold 3D printers for a number of years, after all. Perhaps the biggest thing that's changed however, is the quality, and reliability of their output.

We are proud to introduce an entirely new range of 3D printers, scanner & pen representing fantastic value for money with amazing features and reliability. Now you can find an amazing printer that fits your own unique prototyping requirements, as well as your budget. From the small daVinci Nano opposite, to the all-metal Guider II on the next page. Check it out!

### 3D SCANNER

Turn your physical world into digital replicas, where you can modify them, and then reproduce them with 3D printing. Need to replace that broken part that you can't find in stores? Want to make a gift for someone but don't know how to 3D model it? Simply scan the desired objects to recreate them in different sizes, or change it completely to create new ones! The XYZ printing Handheld 3D Scanner has a compact and light design which allows you to move it around the desired target for scanning with ease. No large, complicated equipment necessary!

SPECIFICATIONS	TL-4250
Scan Engine	Intel® RealSense™ Camera
Maximum Scan Volume	100cm x 100cm x 200cm (WxDXH)
Minimum Scan Volume	5cm x 5cm x 5cm (WxDXH)
Scan Resolution	1.0 ~2.5mm
Depth Image Size	640 x 480 @ 30 FPS
Colour Image Size	640 x 480 @ 30 FPS
Operating Range	30 - 70 cm
Data Interface	USB 3.0
Dimension	41 x 157 x 61 mm
Weight	238g
Output File Types	XYZscan Handy/.stl, .obj, .ply
Operating System	Windows 8.1 and above (64-bit)
Minimum Hardware Requirement	4th Generation Intel® Core™ i5 Processor (PC)

CAT.	Qty 1+	Qty 5+
TL-4250	\$399.00	\$359.00

### XYZ 3D COOL PEN

Compared with other 3D pens on the market, the da Vinci 3D Pen Cool is specifically designed for children 6 years and above thanks to its safety features. It uses non-toxic filament (PCL) that prints with low heat and leaves no mess.

#### USB POWERED FOR PORTABILITY

You can start 3D drawing right after powering on and loading the filament. The 3D Pen uses a Micro USB charging cable and its compact design lets you move it around easily so you can draw comfortably. Use on a Power bank for added portability.

#### TWO EXTRUSION MODES

The 3D Pen Cool has two extruding modes, Controlled Mode and Auto extrusion mode. Controlled mode puts you in charge of the rate of extrusion while the Auto Mode prints continuously for convenient printing. These modes help you decorate objects such as mugs, plastic containers and toys easily.



SPECIFICATIONS	TL-4252
Print Technology	Fused Filament Fabrication
Nozzle Diameter	12mm
Filament Type	PCL
Dimension	180(L) x 26(W) x 27.4(D)mm
Weight	72g
Input Voltage	5V at 2A

CAT.	Qty 1+	Qty 5+
TL-4252	\$129.00	\$115.95



## 3D PRINTERS

### DAVINCI NANO 3D PRINTER

The da Vinci Nano is one of the most compact 3D printer in the market at a 120 x 120 x 120mm build size. It's size makes it perfect fit for any desktop at home, school, or the office.

The Nano is perfect for printing with the whole family. It's compatibility with XYZmaker Mobile, an easy-to-use 3D modelling software, provides simple toy models to download and customize so your family can create their own toys together.

An LED light conveniently displays the print status (green light = standby, red light = stop, orange light = print in process).

#### OPERATING SYSTEMS:

Windows 7, 8, 8.1 and 10, 64 bit  
Mac OS X 10.10, OS X 10.11, OS X 10.12  
Linux Ubuntu 14.04, Ubuntu 16.04

*Note: Standt operating system, or a graphics card doesn't support OpenGL 2.1, may cause unknown error in XYZware Pro.*

#### HARDWARE REQUIREMENTS:

X86 32/64-bit compatible PCs with 4GB+ DRAM (for PC)  
X86 64-bit compatible Macs with 4GB+ DRAM (for Mac)

*Note: Filament is proprietary due to the speciated spools required.*



	CAT.	Qty 1+	
	TL-4210	\$389.00	
FILAMENT TO SUIT	CAT.	Qty 1+	Qty 5+
XYZ Nano Black	TL-4211	\$59.95	\$53.95
XYZ Nano White	TL-4212	\$59.95	\$53.95
XYZ Nano Blue	TL-4213	\$59.95	\$53.95
XYZ Nano Yellow	TL-4214	\$59.95	\$53.95
XYZ Nano Red	TL-4215	\$59.95	\$53.95

#### SPECIFICATIONS

	TL-4210
Print Technology	Fused Filament Fabrication (FFF)
Build Size(L/W/H)	120 x 120 x 120 mm
Layer Resolution	0.1 mm - 0.3 mm
Print Material	PLA, PETG, Tough PLA
Nozzle Diameter	0.3 mm
Filament Diameter	1.75 mm
Print Head	Single Nozzle
Printed Bed	Removable/Non-Heated
Auto Calibration	YES
Dimensions	378(W) x 280(H) x 355(D)mm
Weight	4.7kg
Print Software	XYZmaker
Power	100V-240V 12V@5A, 60W
Connectivity	USB 2.0 Cable

### ADVANCED HOBBYIST 3D PRINTER

The Finder is the easiest-to-use 3D printer so far. Supplier fully assembled the Finder has a very clean design with cables concealed from sight within the plastic alloy frame. All the heated components are kept away from touch. With its assisted levelling system, you just need to do a few tweaks before starting prints.

Single non-toxic PLA filament option keeps your creations simple and fun. Low noise operation of 50dB or even less. Featured with a 3.5-inch touchscreen panel, filament-run-out detection, USB stick, 2nd Generation Wi-Fi connection, and more. Finder delivers you a top-notch user experience that other 3D printers cannot.



SPECIFICATIONS	TL-4220
Printing Technology	FFF (Fused Filament Fabrication)
Build Volume	140(L) x 140(W) x 140(H)mm
Layer Resolution	100-500 microns
Positioning Precision	XY = 11 microns Z = 2.5 microns
Filament Diameter	1.75mm
Nozzle Diameter	0.4mm
Frame & Body	Plastic Alloy
Extruder Quantity	One
Product Dimension	420(L) x 420(W) x 420(H)mm
Product Weight	20kg
Software & Firmware	FlashPrint
Operating Systems	Windows 7/8/Vista, Mac OS X
Connectivity	Wi-Fi, USB Cable, USB Stick
Power	115-230VAC, 50-60Hz, 150W
CAT.	Qty 1+
TL-4220	\$899.00



## 3D PRINTERS (CONTINUED)

### FULL FUNCTION DUAL FILAMENT 3D PRINTER

The Inventor is a filament-based 3D printer with a totally-enclosed design that is safe to use indoors and around children. It features a stunning 50 micron print resolution for head-turning quality. Five cooling fans are equipped with a temperature activated sensor that regulates the build chamber temperatures. Tired of printing with ABS and PLA, you can also try soluble filaments or even exotic filament such as flexible or composite materials with the Inventor. Oh no, you left the office for the day and had a power outage, no problem with the Inventor as the resume print feature will get back to printing once power has been restored. The Inventor features a built-in camera so you can monitor the progress of your prints remotely. Simply download and connect to the mobile app to see your design come to life.

- Patented Dual-Extruder Structure:
- Support dual-colour and dual-material printing.
- Efficient Slicing Software:
- FlashPrint, the mainstream slicing software used by FlashForge, has gained outstanding reviews by the media and professionals.

The software further offers an expert mode, which allows dozens of parameters to be set by the user, for greater printing flexibility. With the external/internal compensation feature the dimensional errors are reduced to 0.02 mm.



# STEM



**NEW**  
2018



CAT.	Qty 1+
TL-4230	\$1,599.00

#### SPECIFICATIONS

<b>Printing Technology</b>	Fused Filament Fabrication (FFF)
<b>Build Volume</b>	230(L) x 150(W) x 160(H)mm
<b>Positioning Precision</b>	XY: 11 microns
<b>Layer Resolution</b>	Z: 2.5 microns
<b>Nozzle Diameter</b>	0.4mm
<b>Filament Diameter</b>	1.75mm

#### MECHANICAL & DIMENSIONS

<b>Frame &amp; Body</b>	Plastic Alloy
<b>Printer Dimensions</b>	485(L) x 344(W) x 382(H)mm
<b>Extruder Quality</b>	Two
<b>Product Weight</b>	14.8kg

#### SOFTWARE & ELECTRICAL

<b>Software &amp; Firmware</b>	FlashPrint
<b>Connectivity</b>	Wi-Fi, USB cable, SD card
<b>Operating System</b>	Windows XP/Vista/7/8/10, Linux, Mac OS X
<b>AC Input</b>	100V-240V, 4.5A-2.5A

### FULL FUNCTION EXTRA LARGE 3D PRINTER

Guider II is a professional FFF (Fused Filament Fabrication) 3D printer. With an all-metal frame design and body side panels made of high-strength ABS material, the Guider II not only has a stable print performance, but also lightweight and durable. Perfect for the architectural and construction sector, science research, manufacturing industries and education.

FlashPrint, the mainstream slicing software used by FlashForge, has gained outstanding reviews by the media and professionals. The software further offers an expert mode, which allows dozens of parameters to be set by the user, for greater printing flexibility. With the external/internal compensation feature the dimensional errors are reduced to 0.02 mm.

- Innovative Extruder System – completely encased air supply system to elevate printing smoothness
- Heatable Build Plate – supports multiple mainstream filament types for diverse printing needs
- Touch Screen – Guider II is equipped with a 5-inch full colour touch screen and multilingual user interface.



# STEM



**NEW**  
2018



SPECIFICATIONS	TL-4240
<b>Technology</b>	Fused Filament Fabrication (FFF)
<b>Build Volume</b>	280x250x300mm
<b>Extruders</b>	Single
<b>Extruder Temperature</b>	0-240°C
<b>Layer Resolution</b>	±20mm
<b>Positioning Precision</b>	XY: 11 microns; Z: 2.5 microns
<b>Layer Thickness</b>	0.1-0.5mm
<b>Nozzle Diameter</b>	0.4mm
<b>Print Speed</b>	24cc/h
<b>Heat Plate Temperature</b>	0-120°C
<b>Screen</b>	5" full color IPS touchscreen
<b>Power</b>	110V/230V (adjustable); 500W
<b>Overall Size</b>	549(L) x 490(W) x 561(H)mm (excludes top lid)
<b>Connectivity</b>	USB Cable/USB Dongle/Wi-Fi/Ethernet
<b>Operating System</b>	Windows XP/Vista/7/8, Mac OS X/Linux
<b>Slicing Software</b>	FlashPrint

CAT.	Qty 1+
TL-4240	\$2,499.00

## Select Your Model: Filament Guide

Over these pages you can see that Jaycar sells an extensive range of 3D printer filaments from standard PLA to exotic filaments, including conductive, flexible and glow-in-the-dark. If you're wondering which filament to purchase, looking to fine-tune your printer, or just curious to find out what options are available have a look at the table below. Our in-house boffins have tested our filaments under all sorts of conditions to work out exactly what the best settings are for printing. We've listed recommended bed and nozzle temperatures, and other suggestions to get the best out of your filament.

	Type:	Extruder Temp	Bed Temp	Notes:
	TL-4110, TL-4112, TL-4114, TL-4116, TL-4118, TL-4120, TL-4122, TL-4138, TL-4060, TL-4062	PLA	180-220 20-55	PLA (Polylactic Acid) is one of the two most commonly used 3D printing filaments (with the other being ABS filament). It is the "default" recommended material for many 3D printers with good reason - PLA is useful in a broad range of printing applications, has the virtue of being both odourless and low-warp, and does not require a heated bed. PLA filament is also one of the eco-friendlier 3D printer materials available; it is made from renewable resources E.g. corn-starch, sugar cane. PLA plastic is often used in food containers, such as candy wrappers, and biodegradable medical implants, such as sutures. PLA filament for 3D Printing is available in a wide range of colours in both 1.75mm and 3mm.
	TL-4070, TL-4072	ABS	220-235 80-110	ABS (Acrylonitrile Butadiene Styrene) is another commonly used 3D printer material. Best used for making durable parts that need to withstand higher temperatures. In comparison to PLA filament, ABS plastic is less "brittle" and more "ductile." It can also be post-processed with acetone to provide a glossy finish. When 3D printing with ABS filament, a heated printing surface is recommended, as ABS plastic will contract when cooled leading to warped parts. ABS filament is available in both 1.75mm and 3mm.
	TL-4152, TL-4154, TL-4155, TL-4156	PET	210-230 35-60	PET (Polyethylene Terephthalate) is a versatile and lightweight filament used in 3D printing. PET material is predominately used to produce plastic bottles and other food packaging as it can be 100% recycled. PET is stronger and more flexible than ABS and PLA filaments. PET filament has a higher print success rate in comparison to PLA. PET has a high level of optical transparency (90%) and resolution. PET is easy to handle and is ideal for anything functional that needs to be robust with a degree of flexibility.
	TL-4134	Glow in the Dark	180-240 20-80	Glow-in-the-dark filament is a great product to decorate children's bedrooms, from glowing light switches to a starry sky on the ceiling. Your prints will shine brightest immediately after turning out the lights, but dim quickly to a soft glow in the night. Use your normal print settings for PLA, but add more perimeters to your prints. The more perimeters, the more glow. Glow-in-the-dark filament is available in PLA filament 1.75mm.
	TL-4136	Flexible	210-225 20-55	TPE filament is a flexible 3D printing material that feels and acts much like flexible rubber. TPE filament can be used to make parts that can bend or must flex to fit their environment: stoppers, belts, springs, phone cases, and more. Due to its flexibility, much slower print speeds must be used to keep the filament from binding in the extruder- we print at 20% speed.
	TL-4124	Wood	175-250 30-50	This is a wood-like 3D printer materials that give 3D printed objects the look and feel of fibreboard. They imbue parts with other wood-like attributes, such as the ability be cut, painted, and sanded. These filaments use PLA as their base, and mix other materials (usually in powder form) into them. The PLA gives the 3D printer compatibility and ease of use while the material contributes to the look, feel, and properties of the filament. With these organic fills, be cautious of too high of a temperature, as it will result in the wood burning which will give you a darker coloured print. It is important to remove the filament from the extruder fairly soon after finishing a print, as the filament will begin to burn in the nozzle and start to clog it.
	TL-4140	Conductive	215-230 20-50	Conductive Filament is a modified PLA, designed for low voltage and low current circuitry. Conductive PLA filament is available in 1.75mm. Note: Due to the additive in this filament, it is very brittle and should be handled with care.
	TL-4142	Wax	80-180 20-50	The wax based filament has a glossy appearance like wax, but a slightly soft rubbery feel because of the binders used to help it extrude. As you can imagine, it softens and melts at a much lower temperature than other filaments. Could be used to create lost wax models for casting, or even directly print an easily removable negative for direct casting.
	TL-4126, TL-4128, TL-4130, TL-4132	Metallic	195-220 20-50	These metals infused PLA filaments are tougher to print than Standard PLA filament, but because of the metal blended with the plastic, prints are heavier and thus, feel more authentic. Finished 3D prints can be sanded and polished to create beautiful and unique pieces. Unpolished, the filament looks like cast metal fresh from a mould, with a dull, matte, gritty appearance. With just a little finishing and polishing, however, you can easily create any look like you desire. 3D Printing with these metals is perfect for printing jewellery, props, costumes, figurines, and robots. These filaments are great not only for hobbyists looking to make faux metal prints, but serious designers as well.



**WINNER**

### Smart Hardware Competition:

- LUKE BRANDON, SHOPS AT JAYCAR  
TWEED HEADS SOUTH

"I upgraded my homebuilt 3D Printer with a raspberry pi and google home device. The printer is now partially voice controlled and connected to the internet allowing for much easier printing from anywhere in the world"



## 3D PRINTER STANDARD FILAMENTS

### FILAMENT FOR 3D PRINTERS

Note: 3mm not suitable for 3D Pen.



TL-4110

TL-4112

TL-4114

TL-4116

#### PLA - 250G:

DIA.	COLOUR	WEIGHT	CAT.	Qty 1+	Qty 3+	Qty 6+
1.75mm	Black	0.25kg	TL-4110	\$15.95	\$14.35	\$12.75
1.75mm	Red	0.25kg	TL-4112	\$15.95	\$14.35	\$12.75
1.75mm	Clear	0.25kg	TL-4114	\$15.95	\$14.35	\$12.75
1.75mm	Green	0.25kg	TL-4116	\$15.95	\$14.35	\$12.75
1.75mm	Blue	0.25kg	TL-4118	\$15.95	\$14.35	\$12.75
1.75mm	Yellow	0.25kg	TL-4120	\$15.95	\$14.35	\$12.75
1.75mm	White	0.25kg	TL-4122	\$15.95	\$14.35	\$12.75



TL-4070

TL-4060

#### ABS - 1KG ROLL:

DIA.	COLOUR	WEIGHT	CAT.	Qty 1+	Qty 3+	Qty 6+
1.75mm	Black	1kg	TL-4070	\$59.95	\$53.95	\$47.95
3.00mm	Black	1kg	TL-4072	\$49.95	\$44.90	\$39.90

#### PLA - 1KG ROLL:

DIA.	COLOUR	WEIGHT	CAT.	Qty 1+	Qty 3+	Qty 6+
1.75mm	Black	1kg	TL-4060	\$54.95	\$53.95	\$43.90
3.00mm	Black	1kg	TL-4062	\$54.95	\$49.45	\$43.90

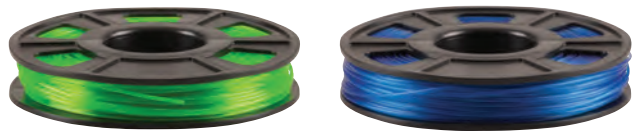
### 1.75MM PET 3D PRINTER FILAMENT

250g roll of 1.75mm PET filament for 3D printers. Recyclable PET is a stronger alternative to PLA and doesn't smell as bad as ABS when printing. There's four variants of PET available, red, blue, green and yellow, and they are all translucent, giving a stand-out look to your 3D prints.



TL-4152

TL-4154



TL-4155

TL-4156

		CAT.	Qty 1+	Qty 3+	Qty 6+
Red		TL-4152	\$19.95	\$17.95	\$15.95
Yellow		TL-4154	\$19.95	\$17.95	\$15.95
Green		TL-4155	\$19.95	\$17.95	\$15.95
Blue		TL-4156	\$19.95	\$17.95	\$15.95

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.



## 3D Printer Exotic Filament:

Our range of exotic filaments are sure to appeal to anyone interested in 3D printing. There's filament that makes your creation look like it's made from wood, glow-in-the-dark, flexible and colour changing filament when heat is applied, and more. Imagine the possibilities with the conductive filament shown below, and have a look at our new wax filament at the bottom of the page if you want to try your hand at low-cost wax casting. All of our exotic filaments are 1.75mm, supplied in 250g rolls, and are all suitable for our current and superseded 3D printers.

- 250g Roll



### WAX 3D PRINTER FILAMENT

Wax filament for 3D printers suitable for lost-wax casting. Print your favourite 3D object and cast it in plaster (or any other casting material). Then remove the wax using heat (hence - lost wax) and use the plaster mould to cast your object in your favourite metal.



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Wax	1.75mm	TL-4140	\$39.95	\$35.95	\$31.95

### CONDUCTIVE 3D PRINTER FILAMENT

Bring your 3D printed projects to life with this electrically conductive PLA filament! Bulk resistivity is 0.6g.cm - note that this is not the same as "grams per centimetre", but refers to the resistance of a 1cm cube across opposite sides with full contact. The filament itself measures about 4k ohms per metre, so it is mostly suitable for signal level voltages, but it is conceivable that you could illuminate some LEDs for example. The conductive properties come from graphene embedded in PLA which is a biodegradable.

Note: Due to the additive in this filament it is very brittle and should be handled with care.



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Conductive	1.75mm	TL-4142	\$19.95	\$17.95	\$15.95

### WOOD FINISH 3D PRINTER FILAMENT

Perfect for recreating antique furniture and recreating small wooden features. Prints with a smooth finish that is ideal for painting, or even finishing with a wood-burning tool. The colour also suits models of animals and natural creatures. Use with a 3D printer or our TL-4050 3D pen.

- Contains wood, so models smell like wood
- Can be printed at different temperatures to give different colours



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Wood	1.75mm	TL-4124	\$19.95	\$17.95	\$15.70

### COPPER FINISH 3D PRINTER FILAMENT - TL-4126

Did you know that the Statue of Liberty is made of copper? Now you can recreate any similar structure (miniaturised version of course) with this filament. Combine with Brass Finish Filament (TL-4130) for creating steampunk works, or brush with some green paint to give a classic corroded copper patina. Use with a 3D printer or our TL-4050 3D pen.

- Contains copper, giving models weight and excellent thermal properties



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Copper	1.75mm	TL-4126	\$24.95	\$22.50	\$19.95

### ALUMINIUM FINISH 3D PRINTER FILAMENT

Ideal for printing a classy looking enclosure for your next project. Could also be used to imitate silver or stainless steel. Gives a metallic look without the unwieldy weight normally associated with solid metal objects. Use with a 3D printer or our TL-4050 3D pen.

- Contains aluminium



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Aluminium	1.75mm	TL-4128	\$24.95	\$22.50	\$19.95



## 3D PRINTER PARTS

### SPARE PARTS FOR TL-4076 / TL-4090 3D PRINTERS

#### SPARE NOZZLE TO SUIT TL-4076 AND TL-4090

- Brass
- 0.35mm orifice

TL-4077



#### SPARE PTFE BARREL LINER FOR TL-4076

- 2mm ID
- 3mm OD

TL-4079



	CAT.	Qty 1+	Qty 4+	Qty 10+
Nozzle	TL-4077	\$9.95	\$8.95	\$7.95
PTFE Barrel	TL-4079	\$4.95	\$4.45	\$3.95

### TL-4100 3D PRINTER SPARE PARTS

Range of spare parts to keep your TL-4100 Printer in full working order. Happy printing!

*Note: Not available at all stores but can be ordered.*



	CAT.	Qty 1+	Qty 3+	Qty 6+
Main Control Board V1.2	TL-4104	\$129.00	\$114.90	\$99.90
Stepper Motor Short Cable	TL-4106	\$4.95	\$4.45	\$3.95
Display & SD Card Module	TL-4107	\$29.95	\$26.95	\$23.95
12V 16A Power Supply	TL-4109	\$89.95	\$80.95	\$71.95
Heated Print Bed	TL-4111	\$59.95	\$53.95	\$47.95
M6 Teflon Tube Connector	TL-4117	\$4.95	\$4.45	\$3.95
Synchronous Wheel for Belt Drive	TL-4119	\$14.95	\$13.45	\$11.95
Collision Limit Switch Module	TL-4121	\$19.95	\$17.95	\$15.95

## 3D PRINTER ACCESSORIES

### DIY 3D PRINTING BOOK

This book compiled on 3D printing with Autodesk 123D, Tinkercad, and MakerBot reveals how to turn your innovative ideas into physical products that you can use or sell! This book will guide you to how to operate powerful, free software from Autodesk and bring your creations to life with the MakerBot - a leading consumer printer - or an online service bureau. The included practical lessons take you through the Design, Catch, Meshmixer, Tinkercad, Make, and CNC Utility apps, and the MakerBot Desktop. Fun projects, easy-to-follow instructions, & clear screenshots progress from installing the software to printing the design.

Videos & digital files accompany this hands-on guide.

- Make your own creations with Design and Tinkercad
- Download editable, premade content
- Generate construction documents with the Layout feature
- Create and edit a reality capture model with Catch
- Edit and mash up .stl files with Meshmixer
- Navigate the MakerBot Desktop
- Print the model on your own machine or with a service bureau



	CAT.	Qty 1+
Softcover, 302 pages. 274 x 216mm	BM-7122	\$44.95



Products with this icon are not stocked in stores but are easily ordered



FLEXIBLE TL-4136



GLOW IN DARK TL-4134



WOOD TL-4124



COPPER TL-4126



GOLD TL-4132



ALUMINIUM TL-4128

## 3D PRINTER EXOTIC FILAMENT (CONTINUED)

### BRASS FINISH 3D PRINTER FILAMENT

Perfect for recreating copper alloy antiques or for making imitation brass instruments, or combine with Copper Finish Filament (TL-4126) for those steampunk projects. Will not corrode or suffer from "ammonia attack" like the real thing!

- Contains brass, giving models weight and excellent thermal properties



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Brass	1.75mm	TL-4130	\$24.95	\$22.50	\$19.95

### GOLD FINISH 3D PRINTER FILAMENT

Gold colour only. This filament is every costume jeweller's dream come true! Your imagination will be the only limit as you recreate your favourite bracelet, ring or brooch. Create your own gold trophy or medal and thank yourself for a job well done. Use with a 3D printer or our TL-4050 3D pen.



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Gold	1.75mm	TL-4132	\$19.95	\$17.95	\$15.70

### GREEN GLOW IN DARK 3D PRINTER FILAMENT

Print your own bedroom skyscape or other novelty items with glow in the dark filament. Glows after exposure to most light sources.

- White material glows green



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Green Glow in the Dark	1.75mm	TL-4134	\$19.95	\$17.95	\$15.95

### FLEXIBLE 3D PRINTER FILAMENT

If you're looking to print something with a bit of bendiness, try our flexible filament. Has excellent adhesion and prints well without splitting. Due to increased flexibility, printer may need modification to guide filament correctly.

- Pale pink skin-like colour

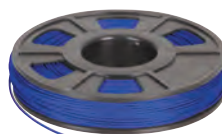


	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Colour Changing	1.75mm	TL-4138	\$19.95	\$17.95	\$15.95

### COLOUR CHANGING 3D PRINTER FILAMENT

Create some 3D printed artwork with an enchanting heat activated colour change effect. Colour change occurs below body temperature, so simply holding the printed object will cause the transition.

- Blue material changes to white on exposure to heat



	DIAMETER	CAT.	Qty 1+	Qty 3+	Qty 6+
Flexible	1.75mm	TL-4136	\$19.95	\$17.95	\$15.95

## Mini Makers - Makers - Parents - Educators

Bright, creative and energetic kids generally show these characteristics fairly early. You generally have a pretty good idea whether you have a budding "rocket scientist" (boy or girl) by the time they are about 4 years old. (Some kids are late bloomers so don't worry!)

If you feel that you have one of these in your tribe, it's never too early to encourage them.

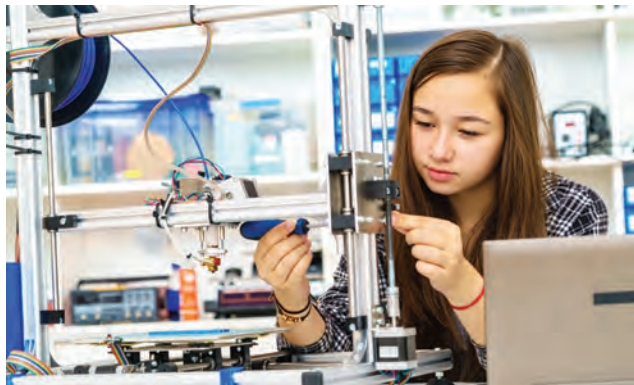
The following pages contain information on clever products that are suitable for kids who have not fully developed motor skills but can snap products together (like LEGO™) which they would already be familiar with.

Jaycar has concentrated on learning systems for home that ultimately lead to a more formal approach through the STEM curricular currently coming through schools (see below.)

If you are lucky enough to have a bright child (or 3!) it really behoves you to show them the learning opportunities that modern products provide.

Wouldn't it be wonderful to be able to say that you guided your child to a lucrative, productive, interesting and meaningful life by showing them something that motivated them from a very early age.

As a parent educator of young children have a look at this section.



### STEM

Both the Australian and New Zealand Governments have identified Science, Technology, Engineering and Mathematics (STEM) as the keystone to creating a differentiated and readily adaptable economy, now and in the future. Key part of these strategies is to ensure teaching and training in STEM discipline and methodologies will prepare a dynamic workforce and a foundation for lifelong STEM literacy in the community. To support these initiatives, there has been major developments in K to 12 and University curriculum and teacher development programs.

So, if you're a Parent or an Educator and want practical resources or help, then your local Jaycar Store or Stockist can assist with a wide range of learning projects in science, green power, robotics and construction kits for the kids to build themselves or for more electronics based learning from basic non-soldering kits through to Arduino® or Raspberry Pi programmable modules, and our great range of 3D printers and accessories.



### JAYCAR WORKSHOPS & IN-STORE EVENTS

Over the last 6 months we have initiated in-store workshops in a few of our stores. They are practical, hands-on short courses to extend the knowledge base and skills of the participants.

We are developing specialised workshops as resource and training programs to assist Teachers and Students to maximise the STEM opportunity in their schools and colleges. Join our Educator's Club, Neuron, to receive updates and invitations to our scheduled Workshops, check out our website or ask in-store.



# STEM

### CAREER COUNSELLING ADVICE IN THE NEW ECONOMY...

Don't ask kids what they want to be when they grow up, but what problems they want to solve. This changes the conversation from who do you want to work for, to what do you need to learn to be able to do it.

**JAIME CASAP, GOOGLE GLOBAL EDUCATION EVANGELIST**

### NEW EDUCATION CLUB!

#### TO BE RELEASED IN JULY 2018

#### SPECIAL CLUB FOR STEM AND OTHER DISCIPLINE EDUCATORS

Are you a STEM educator looking for inspiration in electronics for your classroom?

Looking for electronics resources for your school?

Need electronics kits for your students in bulk?

Is retail pricing not an option for your school? Or is specialised pricing important to your school?

#### BENEFITS:

- Specialised pricing on educational products
- Exclusive access to a STEM projects database designed specifically for educators
- Regular promotional offers
- Invitations to attend special educator workshops held in-store or in-class
- Early bird updates on new products arriving in the STEM and education technology range to allow time to plan lesson content

#### WE ARE HERE TO HELP!

Jaycar Electronics is a one stop shop for all your electronics needs with 110+ stores located across Australia and New Zealand.



### SPECIAL EDUCATION VALUE PACKS & CUSTOMISED PACKAGES

Our Team at Jaycar have put together some value packs for Educators.

The following few pages show some of these, however if your School or College requires a specific combination of products to support your class learning objectives contact us on [customschool@jaycar.com.au](mailto:customschool@jaycar.com.au)

- Education special value pack pricing
- 30-day account – in-store or online
- Volume quoting available on request
- Customised packages
- Scheduled and forward ordering service

### SCHOOL, COLLEGE AND UNIVERSITY ACCOUNTS


Jaycar will automatically provide account facilities for the following institutions:

- All schools - K to 12 (Government and non-Government)
- All CAE's, Colleges, Universities, etc.
- The account is 30 days and the invoice will go with the goods or to your accounts payable office
- There is a \$15 minimum order where Purchase Order number is provided
- Just go to the Jaycar website at [www.jaycar.com.au/paymentmethod](http://www.jaycar.com.au/paymentmethod) - download the account application or apply for a credit account online



## Education Value Packs



 Products with this icon are not stocked in all stores but are easily special ordered in Store or online.

### MAKEBLOCK NEURON INVENTORS KIT 5 PACK

The pack includes 5 complete sets of Makeblock Neuron Inventors Kit  
For full details of on Neuron Inventors Kits see page 76.

**\$895.00 Save over 10%**

Includes GST  
CAT. KJ-9192

### MAKEBLOCK NEURON INVENTORS KIT 10 PACK

The pack includes 10 complete sets of Makeblock Neuron Inventors Kit  
For full details of on Neuron Inventors Kits see page 76.

**\$1,675.00 Save over 15%**

Includes GST  
CAT. KJ-9194



### ULTIMATE EDISON ROBOT EDUCATION PACK

Equip the whole class with this custom-made Edison Kit!

- 6 x Edison V2 robots
  - 3 x EdCreate 5-in-1 expansion packs
  - 2 x Spare parts packs
  - 2 x Self-healing vinyl EdMats
  - 40 x AAA batteries
- For details of individual items see page 82.

**\$650.00 Save over 25%**

Includes GST  
CAT. KR-9215



### MAKEBLOCK CODEY ROCKY ROBOT KIT 5 PACK

The pack includes 5 x Codey Rocky Robot Kit.  
For full details of on individual items see page 80.

**\$670.00 Save over 10%**

Includes GST  
CAT. KR-9232



## Tech Talk: Coding - The New Language to Learn

Over the years, learning a language meant studying a language which wasn't your native language, like French or German or Chinese. If you started early then that second language was with you for life. Today you can use Babel or Google to translate language. The world is different. In today's disruptive environment the Technology Languages form the foundation for the disciplines and skills needed to succeed in the global market place. Today, students are learning Code and learning it from an early age and it will be with them for life.

### CODE CAMP

It's a lot of fun and incredibly engaging.

Code Camp offers 2 to 4-day coding camps over multiple locations (75 locations over last summer holidays) across Australia. They cater for children 5 to 13 years of age.

During camps, the kids create and build their own games, learn about user design, and user experience. These skills can be adapted to any role in any industry. The end result is an app that works on multiple devices, so every kid walks away with their own self-created game no matter what!

### WANT MORE INFORMATION?

Check out the Code Camp website [www.codecamp.com.au](http://www.codecamp.com.au)

### IN NEW ZEALAND?

There are a number of similar organisations in New Zealand with similar platforms for kids to learn code. Here are some of their website details:

Code Camp NZ [www.codecamp.co.nz](http://www.codecamp.co.nz)

Club Aotearoa <https://codeclub.nz>

Scratchpad [www.scratchpad.co.nz](http://www.scratchpad.co.nz)





## mBot Ranger

### STEM Educational Robot Kit



**Makeblock**  
Construct Your Dreams



#### WHAT'S MBOT RANGER?

mBot Ranger Robot Kit is a three-in-one STEM educational robot kit which supports 3 building forms: robot tank, three-wheel racing car, and a self-balance car. Program & Control mBot Ranger via iPad, tablets, or laptop to start your exploration! It's great for both learning programming and having fun!!

Three forms for different scenarios: robot tank, self-balance car, and 3-wheel car. Ready-to-use projects built-in Makeblock App for immediate fun and play. Graphical programming mBlock for kids to learn entry-level coding. Numerous online courses and guides for further study and development.



#### POWERFUL MAINBOARD:

Latest Me Auriga mainboard developed based on open-source Arduino® Mega 2560. It provides not only 5 on-board sensors, but also 10 extension ports that enable you to add more functions per needed.

#### GRAPHICAL PROGRAMMING FROM PC:

mBot Ranger is fully compatible with mBlock which is a graphical programming environment based on Scratch 2.0 Open Source Code. It makes programming projects and interactive applications easier through simply dragging and dropping function blocks.

#### IPAD/TABLET PROGRAMMING:

In addition to PC programming, mBot Ranger also supports being programmed from your iPad and tablets with an easy-to-use app – Makeblock App. Explore with mBot Ranger using the existing projects, or develop your own.

#### WIRELESS CONTROL:

Makeblock App provides existing projects which enable you to interact with Ranger immediately. Push the button to control Ranger wirelessly and start having fun!

#### EASY WIRING:

Modules in this kit all equipped with RJ25 ports for easy wiring. Just by connecting the modules together, robots can be built in a really quick way. All the wiring is simple and very clean.

#### INFINITE EXTENSIBILITY:

Fully compatible with Makeblock platform (about 400 parts totally), allowing you to develop more projects or ideas adding Makeblock parts on Ranger or to explore hundreds of free projects online for more fun.

- 6 x sensors included: Light sensor, Ultrasonic sensor, Line follower, Gyroscope, Temp sensor, Sound sensor
- Main Control Chip: Arduino® Mega 2560
- 12 LED Lamps
- PC Programming: mBlock
- iPad/Tablet Programming: Makeblock HD
- Arduino® compatible
- Communication: Bluetooth/2.4G



Laptop and tablets not included.

**Products with this icon are not stocked in all stores but are easily special ordered in Store or online.**



	CAT.	Qty 1+
Single mBot Ranger	KR-9202	\$299.00

#### What can you build?



#### OFF-ROAD LAND RAIDER:

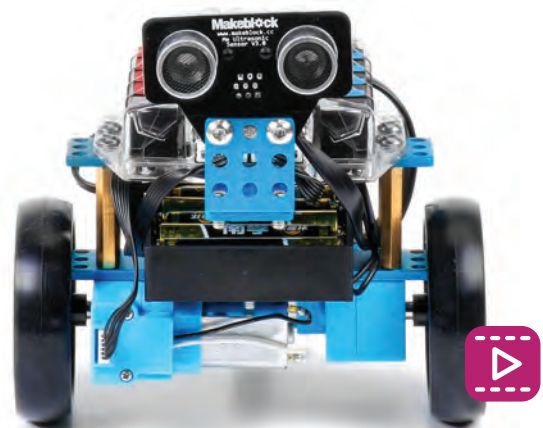
Being an off-road robot tank, Land Raider is designed to handle a wider variety of terrain than most other vehicles or robot cars.

#### DASHING RAPTOR, THE PREDATOR:

Transform your Land Raider easily, turning it into Dashing Raptor, which is a three-wheel racing car that runs/spins fast like a raptor which is eager to catch its game.

#### SELF-BALANCE NERVOUS BIRD:

A smart self-balance car which remains level when driving straight or standing still and leans at an angle when making turns.



#### Attention Educators:

#### MBOT RANGER STEM EDUCATIONAL KIT - 5 PACK

This pack includes 5x mBot Ranger's.

**\$1,395.00**  
**Save over 6%**

**5X**



Includes GST

\* Valid at time of printing

CAT. KR-9204

## Arduino® XY Plotter Kit With Electronic Modules



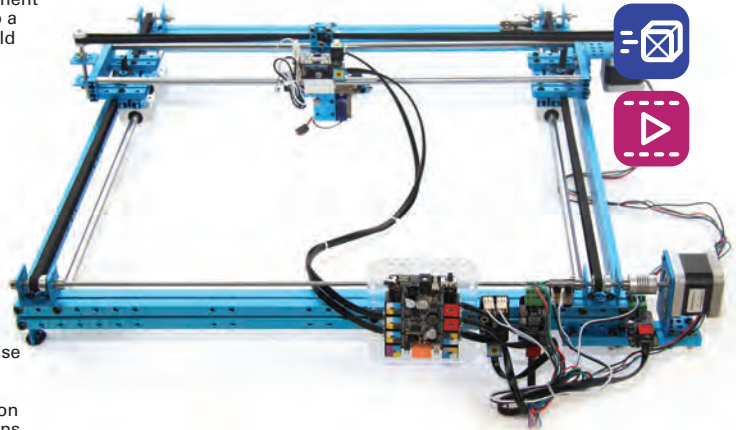
# Makeblock

  
Construct Your Dreams

XY Plotter Kit is a drawing robot that can move a pen or other instrument to draw digital artwork on flat surfaces. It can also be developed into a laser engraver by adding the Laser Engraver Upgrade Kit (TL-4202 sold separately).

This kit comes with over 60 components and requires assembly.

- This kit consists of over 60 kinds of components from Makeblock, including beams, brackets, motors, etc.
- Here's the picture of all the components
- Strong aluminium extrusion parts, anodizing surface
- Two Metal stepper motor with back shaft
- 12V Solenoid
- Me-2H Microstep Driver
- Me-Series Electronic Modules for easy using and programming
- Demo code about Drawing Robot
- Closed type bushing block and ball bushing insert for use in linear motion applications
- Four-bolt aluminum alloy bushing block for a lightweight ready-to-mount installation
- Synthetic resin retainer plate for accurate ball guidance and low noise
- Four rows of recirculating balls inside the ball bushing for smooth running
- Integral lip seals to retain lubricant and protect against contamination
- Round steel shaft for use with slide units in linear motion applications.
- Chrome plated for corrosion resistance
- Case hardened for wear resistance
- Precision ground for consistent ball bushing radial clearance
- XY Plotter V2.0 can be controlled by 2 software, mDraw and Benbox.
- mDraw is a cross-platform open-source software developed by Makeblock
- Compatibility: mDrawBot (mScara, mCar, mEggBot, mSpider), XY Plotter kit (servo mode, laser mode)
- OS Environment: Windows, Mac
- Supported File Type: \*.svg, \*.bmp (convert to \*.svg)
- Benbox is compatible with both servo mode and laser mode of XY plotter. One of the best things about using Benbox is that Benbox support grey-scale engraving, and editing figures and characters within the software



### OPTIONAL UPGRADE: LASER ENGRAVER ADD-ON FOR TL-4200 PLOTTER

The laser upgrade kit is for use in combination with the XY Plotter Robot Kit (TL-4200), adding a laser engraving function to this robot kit. It uses 405nm blue-violet laser as semiconductor laser and a maximum work area of 30 x 305mm, engraving accuracy



	CAT.	Qty 1+	Qty 3+	Qty 6+
Plotter Kit	TL-4200	\$499.00	\$449.00	\$399.00

	CAT.	Qty 1+	Qty 3+	Qty 6+
Laser Engraver Add-On	TL-4202	\$199.00	\$178.95	\$158.95

**BULK PACKAGES AVAILABLE FOR JAYCAR EDUCATION CLUB CARD HOLDERS!**

### ARDUINO® KIT FOR STEM EDUCATION

The Arduino® STEM Kit is the perfect starter kit to Arduino® STEM education. The parts for all projects are included.

#### Includes:

- 1 x Uno board with USB cable
- 1 x Breadboard
- 1 x Servo motor
- 1 x LDR light sensor module
- 1 x RGB LED module
- 1 x Joystick module
- 1 x Buzzer module
- 1 x LED matrix module
- 1 x Line tracer module
- Assorted LEDs
- Assorted pushbuttons
- Assorted resistors
- Assorted jumper cables
- 1 x Carry case with insert tray and dividers
- 1 x Quick start guide with links to online tutorials



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-3900	\$79.95	\$71.95	\$63.95

### RASPBERRY PI 3 STEM KIT

The Raspberry Pi STEM Kit has the basics to get you started.

#### Includes:

- Raspberry Pi 3 Model B
- Official power supply for Raspberry Pi 3 Model B
- Pi breakout board (for connecting the Raspberry Pi to a breadboard)
- Breadboard (for electronics prototyping)
- Raspberry Pi SD Card (16GB) with NOOBS
- Raspberry Pi 3 case
- HDMI cable



	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-9014	\$139.00	\$124.95	\$110.95



Products with this icon are not stocked in all stores but are easily special ordered in Store or online.





## Makeblock Neuron

Programmable electronics building blocks



**Makeblock**  
Construct Your Dreams



GET INSPIRED AND START BUILDING YOUR AWESOME PROJECTS WITH MAKEBLOCK NEURON! EXPLORE MORE EXAMPLES ON NEURON APP. LEARN MORE.

Makeblock Neuron is a programmable electronics building block platform for STEM & STEAM Education.

Neuron integrates education with technology in a way that is accessible, comprehensive and cognitive while preserving all the fun children crave. The kit contains over 30 different kinds of blocks with different functions. Integrated with a flow-based programming app, kids 6 years and older or adults can build a variety of gadgets. Makeblock Neuron is intuitive to use. Simply connect the individual blocks in a snap through magnetic Pogo Pin and pairing the blocks with its flow-based programming application.

The graphical programming is facilitated via the Makeblock Neuron App (For iPad® and Android Tablet). Makeblock Neuron app is an intuitive flow-based programming platform that is amazingly easy to use.

### It helps:

- Recognise blocks in work and codes the Neuron blocks via the flow-based programming
- Enables advanced features, like IoT (Internet of Things)

Just download the app from Apple® App Store or Google Play and follow the instructions.

Neuron supports IoT (Internet of Things), and is compatible with Lego® blocks, other Makeblock platforms, smart Robot AI learning and coding Codey Rocky.

Available in various size kits and individual modules Neuron is an essential resource for Parents and Teachers to provide the environment to develop the STEM learning objects of collaboration, creativity, critical thinking and communication.



**STEM**  
Science, Technology  
Engineering & Mathematics



### CREATIVE CONSTRUCTION - HOW DOES IT WORK?

#### SIMPLE AND EFFORTLESS

Building blocks are connected in a snap with Pogo Pin-connectors, with the added benefit of making each block more durable.

#### CONTROL REMOTELY

Creators can build projects and control them remotely from anywhere in the world over the internet.

#### WIDELY EXTENDABLE

Compatible with Makeblock platform and LEGO® blocks, the number of fun projects you can build is almost limitless.

#### MAGNETIC DESIGN

The magnetic design facilitates home, school or lab work demonstrations and lessons. You can simply place your gadget on a fridge or a whiteboard to show it off and explain how it works

### DON'T PANIC! YOU CAN DO THIS...

#### NO CODING EXPERIENCE REQUIRED!

The graphical programming interface in the Neuron app enables beginners to easily create Neuron applications and add basic or advanced functionality (e.g. IoT – Internet of Things) into their inventions.

#### CONTINUOUSLY UPDATE INVENTIONS GUIDES

The Neuron app comes with Invention Guides and video tutorials to show how to get started building with the Inventors Kit. Follow the guides then lead with your own creative ideas.

mBlock Support: Neuron gadgets can be controlled and programmed using mBlock on desktop and the Neuron app on mobile.

### INVENTOR KIT

#### MAKEBLOCK NEURON INVENTOR KIT

Makeblock have assembled the essential package to get you started. The Neuron Inventors Kit contains 8 programmable electronic building blocks including power, sound, light and sensors. The building blocks are connected via snap magnetic Pogo Pins making them durable and effortless to use. Combine this with the intuitive graphical programming turn your ideas into real, working gadgets.

Make a new invention in just 5 minutes. The Inventors Kit includes 10+ invention ideas and online video guides. Follow, then lead with your own creative ideas. The invention ideas have case materials to help build out the invention, so the gadget is fun and looks great. Some of the invention ideas for you to build are below. For more examples go to: [www.neuron.makeblock.com/en/category/example/](http://www.neuron.makeblock.com/en/category/example/)

- Telegraph
- DJ Machine
- Peace Maker
- Light Pallet
- Singing Glass
- Electric Guitar
- Noisy Robot
- Biting Dinosaur
- 3 Night Lamp
- Happy Rabbit
- Tail Wagging Cat Robot

#### Kit includes:

- 1 x Power Block
- 1 x Bluetooth® Block
- 1 x Buzzer Block
- 1 x FunnyTouch Block
- 1 x FunnyTouch Switch
- 1 x LED Panel Block
- 1 x Gyro Sensor
- 1 x Dual Servo Driver
- 1 x Servo
- 9 x Neuron Boards
- 1 x USB Cable (20cm)
- 1 x Ground Wire
- 36 x Friction Pin Connectors
- 20 x Rubber Bands
- Case Materials Pack
- 1 x Manual



Makeblock  
neuron

SPECIFICATIONS	
<b>Battery</b>	KJ-9190 3.7V 950mAh, Output Voltage 5.1V, Input Voltage 5V, Input Current <1A Working hours @ normal use more than 90mins, Working Temp 0°C to 45°C
<b>Bluetooth</b>	BT4.0, Frequency Band 2402-2480MHz Output Power Class Max. 4dBm
<b>Servo</b>	Operating Voltage 4.5V to 6.0V, Idle Current 6±1mA Limit Angle 180° ± 10°
<b>Product Size</b>	230 x 170 x 70mm
<b>Product Weight</b>	980g



# Makeblock Neuron - Individual Modules & Packs

## COLOURFUL BLOCKS WITH DIVERSE FUNCTIONS

The neuron is classified into four colour coded categories for easy identification and use.



### ✓ ENERGY & COMMUNICATION BLOCKS

Green power blocks support for other blocks. The communication block contains a Micro USB interface, you can connect the block to a power bank, computer or power adaptor via the USB cable to power other blocks. The communication blocks also supply diverse wireless communication modes.

#### POWER MODULES

Power support for other blocks. Power blocks can be charged via mains adaptor or a computer using a USB cable.



SPECIFICATIONS	KJ-9140
Battery Capacity	950mAh
Output Voltage	5.1V
Input Voltage	5V
Input Current	<1A
Operating Temperature	0°C to 45°C
Storage Temperature	-10°C to 55°C
Lifespan	Charge cycle ≥ 300



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9140	\$39.95	\$35.95	\$31.95

#### WI-FI MODULE

The Wi-Fi block has two functions

- Establish a wireless connection between the blocks and tablet computer, then you can program the blocks via Makeblock Neuron app.
- Connect to your router to use more features, like IoT (Internet of Things)



SPECIFICATIONS	KJ-9176
Wireless Standard	IEEE802.11b/g/n
Communication Distance	10m (Open environment)
Working Mode	STA/AP/STA+AP
Operating Voltage	5V
Operating Current	200mA
Operational Temperature	0°C to 45°C



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9176	\$89.95	\$80.95	\$71.95

#### BLUETOOTH® MODULE

The Bluetooth® block has two functions:

- Establish a wireless connection between the blocks and tablet computer within 10 metres, then you can program the blocks via Makeblock Neuron app
- Contain a Micro USB interface enabling you to connect the block to power bank, computer, or power adaptor via USB cable to power the other blocks



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9141	\$39.95	\$35.95	\$31.95

#### WIRELESS TRANSMITTER & WIRELESS RECEIVER

Wireless receiver (wireless-R) receives signals from wireless transmitter (wireless-T) within 10 metres. Includes both wireless transmitter and receiver.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9161	\$74.95	\$66.95	\$59.95

### ✓ CONTROL BLOCKS

The orange control blocks change the output; such as press the button to turn on a light.

#### JOYSTICK MODULE

Push the joystick to control your creation (such as a car) in the X-axis (left-right) and Y-axis (up-down).



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9142	\$24.95	\$22.45	\$19.95

#### BUTTON MODULE

Short press to turn on and release to turn off. Press and hold for 2 seconds to stay in an active state.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9143	\$14.95	\$13.45	\$11.95

#### KNOB MODULE

Turn the knob to increase or decrease output.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9144	\$19.95	\$17.95	\$15.95

#### FUNNY TOUCH MODULE

The funny touch block contains on ground wire and four funny switches. Follow the instructions to use this block in your projects.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9145	\$39.95	\$35.95	\$31.95

#### GYRO SENSOR

Ideal block for motion and posture detection of your creation. It can be used to measure the angular rate and the acceleration information of your creation.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9163	\$29.95	\$26.95	\$23.95



Products with this icon are not stocked in all stores but are easily special ordered in Store or online.



## INPUT BLOCKS

The yellow input blocks collect information (such as sound and light) from the environment and send signals to change the output.

### LIGHT SENSOR

Detects the light intensity of the surrounding area. The brighter the light it receives, the stronger the signal it sends out.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9146	\$19.95	\$17.95	\$15.95

### LINE FOLLOWER SENSOR

Designed to make your creation follow a black line on a white background or a white line on a black background. Detecting range 1 to 2cm.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9147	\$29.95	\$26.95	\$23.95

### ULTRASONIC SENSOR

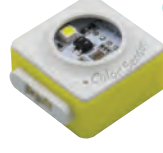
This block can be used to measure distance between the block and obstacles, from 3cm to 300cm



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9148	\$29.95	\$26.95	\$23.95

### COLOUR SENSOR

This sensor detects different colours.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9162	\$39.95	\$35.95	\$31.95

### TEMPERATURE SENSOR

Detects temperature from -30°C to 100°C.

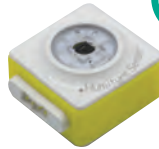


CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9164	\$29.95	\$26.95	\$23.95

### HUMIDITY SENSOR

Detects temperature and humidity of the surrounding area.

- Temperature range: -20°C to 60°C
- Humidity range: 5% to 95%



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9165	\$29.95	\$26.95	\$23.95

### SOIL MOISTURE SENSOR

Detects moisture content of soil.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9166	\$29.95	\$26.95	\$23.95

### SOUND SENSOR

Detects the sound intensity of the surrounding area. The louder the sound it receives, the stronger the signal it sends out.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9149	\$19.95	\$17.95	\$15.95

### PIR SENSOR

Passive Infrared sensor detects motion from humans within 3 metres. If anyone moves in that range, the sensor will send out an on signal to the next block in the sequence.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9150	\$29.95	\$26.95	\$23.95

### CAMERA

Allows you to take pictures by connecting the block to the Wi-Fi block via USB cable and control the block via Makeblock Neuron app. 1280 x 720 pixel resolution. (See website for full camera specifications.)



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9177	\$44.95	\$39.95	\$35.95

## ACCESSORIES

### MAGNETIC WIRE

Provides a more flexible way to connect blocks. Comes in two lengths 10cm and 20cm.



	CAT.	Qty 1+	Qty 3+	Qty 6+
10cm <b>SPECIAL ORDER</b>	KJ-9157	\$9.95	\$8.95	\$7.95
20cm	KJ-9158	\$14.95	\$13.45	\$11.95

### NEURON USB CABLE (20CM)

Allows you to easily connect some specific blocks, such as camera, Mic & Speaker, Bluetooth, Wi-Fi blocks etc. as well as provide power and transmit data. Comes in two lengths 20cm and 100cm.



	CAT.	Qty 1+	Qty 3+	Qty 6+
20cm	KJ-9179	\$4.95	\$4.45	\$3.95
100cm	KJ-9180	\$4.95	\$4.45	\$3.95

### NEURON BOARD

Allows you to snap Neuron blocks to the mechanical parts of Makeblock or to Lego® blocks.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9159	\$14.95	\$13.45	\$11.95

### FIXED CLIPS & RUBBER BANDS

Useful in assembling your creation this pack contains 16 x fixed clips and 80 x rubber bands.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9160	\$4.95	\$4.45	\$3.95

### LASER POINTER

Emits coherent laser beam and runs on a rechargeable battery for up to 40 hours. Laser transit power 1mW and battery capacity is 85mAh.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9156	\$29.95	\$26.95	\$23.95



## OUTPUT BLOCKS

The blue output blocks receive signals from the input blocks or control blocks, and then do something, such as lighting up, moving or making a sound.

### DUAL DC MOTOR DRIVER, DC MOTOR & WATER PUMP

Dual Motor Driver can drive the DC Motor and water pump or 2 DC motors; two devices can be driven simultaneously. All sold separately.

**DUAL DC MOTOR DRIVER** KJ-9167

**DC MOTOR** KJ-9168

**WATER PUMP** KJ-9169

(Available for Special order or online ONLY)

#### SPECIFICATIONS

KJ-9167/KJ-9168		KJ-9169	
<b>Rated Speed</b>	118±10% RPM	<b>Rated Voltage</b>	12VDC
<b>Rated Current</b>	0.1A	<b>Current (with load)</b>	Less than 320mA
<b>Rated Torque</b>	132 g.cm	<b>Total Size</b>	D27 x 75mm
<b>Stall Torque</b>	590±100g.cm	<b>Water Hole Dia</b>	6.5mm
<b>Stall Current</b>	0.4A	<b>Noise</b>	Less than 60dB
<b>Gear Ratio</b>	1:100		

	CAT.	Qty 1+	Qty 3+	Qty 6+
Dual DC Motor Driver	KJ-9167	\$24.95	\$22.45	\$19.95
DC Motor	KJ-9168	\$14.95	\$13.45	\$11.95
Water Pump <b>SPECIAL ORDER</b>	KJ-9169	\$24.95	\$22.45	\$19.95

### DUAL SERVO DRIVER

The servo driver can drive two servos simultaneously. The servo can rotate from 0 to 180 degrees and are sold separately. Sold separately

**DUAL SERVO DRIVER** CAT. KJ-9170

**SERVO** CAT. KJ-9171

(Available for Special order or online ONLY)

#### SPECIFICATIONS

	KJ-9171
<b>Storage Temperature</b>	-20°C to 60°C
<b>Operating Temperature</b>	-10°C to 50°C
<b>Operating Voltage</b>	4.5V to 6.0V
<b>Relative Humidity</b>	65±10%
<b>Idle Current (at stopped)</b>	6±1mA
<b>Stalled Torque (at locked)</b>	1.5 to 1.8kg.cm
<b>Limit Angle</b>	180°±10°
<b>Weight</b>	13.5±0.5g

	CAT.	Qty 1+	Qty 3+	Qty 6+
Dual Servo Driver	KJ-9170	\$24.95	\$22.45	\$19.95
Servo <b>SPECIAL ORDER</b>	KJ-9171	\$14.95	\$13.45	\$11.95

### RGB LED

Change the colour or brightness of the RGB LED via Makeblock Neuron app.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9151	\$19.95	\$17.95	\$15.95

### LED STRIP DRIVER

Allow you to change the colour of each RGB LED and do more interesting things via the Makeblock Neuron app. CAT. KJ-9173

#### LED STRIP TO SUIT

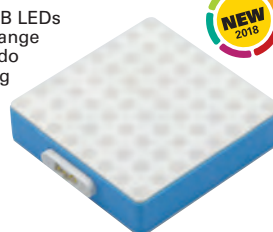
LED strip containing 15RGB LEDs and is 0.5m long. CAT. KJ-9174



CAT.	Qty 1+	Qty 3+	Qty 6+
Strip Driver KJ-9173	\$24.95	\$22.45	\$19.95
RGB Strip KJ-9174	\$14.95	\$13.45	\$11.95

### LED PANEL

Contains 64 RGB LEDs and you can change the colour and do more interesting things via the Makeblock Neuron app.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9172	\$44.95	\$39.95	\$35.95

### BUZZER

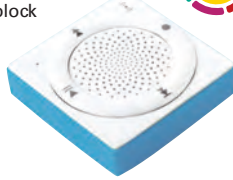
Makes a buzzing sound when it receives an ON signal.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9155	\$19.95	\$17.95	\$15.95

### MIC & SPEAKER

Speak to record your voice or play a sound. Connect the block to Wi-Fi block via USB cable, to control the block via Makeblock Neuron app.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9178	\$44.95	\$39.95	\$35.95

### DISPLAY

Displays the output parameters of the block preceding the display block. Customise the display content via the Makeblock Neuron app.



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9175	\$44.95	\$39.95	\$35.95



### EL WIRE DRIVER & EL WIRE PACKS

Comes with Electroluminescent (EL) wire driver and 1x EL wire. Plug it in and light up the wire. EL Wire driver can drive 4 EL wires simultaneously.

EL Wire Packages to suit KJ-9152

Two different packs of 4 x 1m long EL wire:

- Pack contains 1 x blue, 1 x purple, 1 x pink and 1 x white KJ-9154
- Pack contains 1 x red, 1 x green, 1 x yellow and 1 x orange KJ-9153

(Available for Special order or online ONLY)



	CAT.	Qty 1+	Qty 3+	Qty 6+
EL Wire Driver	KJ-9152	\$24.95	\$22.45	\$19.95
4 Pack EL Wire <b>SPECIAL ORDER</b>	KJ-9153	\$19.95	\$17.95	\$15.95
4 Pack EL Wire	KJ-9154	\$19.95	\$17.95	\$15.95



## Codey Rocky Robot Kit

Your New Coding Companion!



**Makeblock**  
Construct Your Dreams



This is a smart robot for beginners to learn coding and AI learning. Codey Rocky is an entry-level coding robot for STEAM (Science-Technology-Engineering-Arts-Mathematics) education. The combination of easy-to-use robotics hardware with visual programming software mBlock 5, gives all children the opportunity to take their first steps into the world of code and compose their first "Hello World!" statement at the same time as they explore their creativity. Codey Rocky is recommended for children 6 years and up. Its great family fun and can be used in schools by students and educators.

### THE ROBOT COMES IN TWO PARTS:

- Codey is the detachable mainboard that holds all the magic. It includes more than 10 electronics modules that can be controlled via code
- Rocky is the car that lets you take Codey anywhere you want, so that your clever programs can be run everywhere

### WHAT DO YOU LEARN?

- Beginning and advanced coding
- Logical thinking
- Creative expression
- AI and IoT principles

### RESOURCES AND THINGS YOU CAN DO...

- Included with Codey Rocky is more than 20 learning guides for getting started with graphical programming and Python code.
- Projects are only limited by your imagination. Here's some resources to get started. For further detail check out the details online.
- Weather reports
- If this, then that
- Face and age recognition



SPECIFICATIONS	KR-9230
Chip	ESP32
Transfer Method	Wi-Fi / Bluetooth® / USB
Control Platform	Mac OS / Windows / Linux / Chrome OS / iOS
Battery	950mAh Li battery (charging time: 2 hrs approx.)
Features	More than 10 programmable electronic modules, support AI and IoT, cloud storage, 16x8 LED display
Coding Languages	Scratch 3.0, Python

### HOW DOES IT WORK?

- With more than 10 programmable electronics modules, Codey Rocky can be programmed to perform a wide range of fun effects and functions.
- Code to customise expression, to see time, weather and personal messages shown on Codey's large LED display, bring your coding companion to life.
- Codey comes with a built-in 6-axis gyroscope so that you can control the games you code by moving or tilting your controller, and see the game respond to your actions.
- The optional Bluetooth® dongle lets you upload code to your robot companion wirelessly so that you can rapidly try out your code ideas.
- Integrated colour sensor, greyscale sensor and IR distance sensor allows you to adjust the angle of the module for obstacle avoidance, distance sensing, colour detection, line following and many other fun and educational applications
- Codey Rocky is designed to be compatible with Makeblock Neuron and Lego® bricks, to let you realise any idea you can come up with.
- Software is easy to start with MBlock 5 program. Beginners can start coding in minutes. All you need to do is drag and drop. With one click you can turn your graphical code into Python code and continue learning an advanced and practical language.
- mBlock 5 supports AI-functionality including voice recognition, mood sensing and more.
- Use mBlock 5 to add Internet of Things functionality to Codey Rocky and control home appliances, get weather reports and much more!

	CAT.	Qty 1+
Codey Rocky Robot Kit	KR-9230	\$149.00

## Makeblock mBot Bluetooth® Robot Kit

mBot is an all-in-one solution to enjoy the hands-on experience of programming, electronics, and robotics. Working with mBlock inspired by Scratch 2.0, connecting with computers or smart devices via Bluetooth, this easy-to-assemble mBot provides infinite possibilities for you to learn STEM (Science, Technology, Engineering, Mathematics). Contains 38 assembly parts that can be assembled in 10 minutes and color-labeled RJ25 ports for convenient wiring, making sure more time can be spent on programming and creativity. mBot comes with a casing specially designed for protecting main control board. Installed with mini-programs to let you start learning straight away. Online manuals and courses are available to guide students and teachers. mBot can also be programmed with the Arduino® IDE - it uses the same chip as the Uno.



**Makeblock**  
Construct Your Dreams

	CAT.	Qty 1+	Qty 3+	Qty 6+
mBot Bluetooth® Robot Kit	KR-9200	\$199.00	\$178.95	\$158.95

# Airblock Programmable Drone

Build it. Code it. Fly it.



**Makeblock**  
Construct Your Dreams



Airblock is a modular and programmable aircraft able to transform into a drone, hovercraft and more. Its graphical programming interface makes it the perfect opportunity to learn to code by building your own robots capable of trekking on land and gliding through the air!

## YOUR TRANSFORMABLE VEHICLE

Where do you want to go today? Transform Airblock into a hovercraft or drone or build your own DIY vehicle to go wherever you wish. You can even star in your own action film, either as a police or bad guy!

## MODULAR CREATIVITY

One main module and six propeller modules with magnetic connectors makes Airblock easy to transform in creative ways and incredibly fun. Go from drone to hovercraft to your own DIY project in just a few snaps!

## PROGRAM YOUR DRONE

The Makeblock app's graphical interface makes programming easy even for beginners without coding experience.

## FLY WITH YOUR PHONE


Flying with Airblock is easy as it gets! Just grab your Airblock and launch the Makeblock app on your phone, and you're ready for take-off.

## SAFETY

Propeller guards and custom-designed soft foam has been used to construct the frame which makes Airblock safe to use for ages 8 and up.

## AWARDS

Airblock has received numerous awards for its pioneering modular design, safety and ease of use, and the fun it brings to code learners everywhere.

	CAT.	Qty 1+	
Makeblock Airblock Modular Programmable Drone Kit	KR-9220	\$199.00	
<b>SPARES TO SUIT</b>	<b>CAT.</b>	<b>Qty 1+</b>	
Spare Blade Kit	KR-9221	\$4.95	
Spare Clockwise Power Module	KR-9223	\$24.95	
Spare Counter Clockwise Power Module	KR-9225	\$24.95	
Spare Main Control Module	KR-9222	\$149.00	
Spare Head Power Module	KR-9224	\$24.95	
Spare Battery	KR-9226	\$39.95	

**It's fun, and more importantly is able to teach kids coding!.**

- DIYODE MAGAZINE, OCT 2017

## Attention Educators:

### AIRBLOCK STEM EDUCATIONAL KIT

This pack includes 5x Airblock Programmable Drones.

For current value pack pricing please contact [customschool@jaycar.com.au](mailto:customschool@jaycar.com.au)  
CAT. KR-9228





## littleBits Gizmos and Gadgets Kit:

Get your kids off the lounge, and help them engage with robotics, inventions, and electronics! The Littlebits kit includes parts and instructions for 16 fun and educational kits. It uses safe, low voltage electronic building blocks, that simply clip together - no advanced knowledge or skills required! But Littlebits is much more than just a set of components. Using the included Bluetooth® connectivity and your own smart device, you can make your creations move and change with the tap or shake of your device! It provides hours of hands-on experimentation and creative construction, with fun and engaging outcomes! Recommended for ages 8+, but also suitable for "big kids" too.

- Instructions for 16 inventions
- Thousands of inventions online
- Endless hours of fun
- Recommended age: 8+

### Includes:

- 1x Invention Guide
- 1x Power
- 1x Bargraph
- 1x Buzzer
- 1x Servo
- 2x Bluetooth® Low Energy Bit
- 1x Light Sensor
- 1x Slide Dimmer
- 1x Split
- 1x Servo Mount
- 1x 9v Battery
- 1x Battery Cable
- 1x Fan
- 2x DC Motor



littleBits™



	CAT.	Qty 1+	Qty 3+
littleBits Gizmos and Gadgets Kit	KJ-9100	\$389.00	\$349.00

## Meet Edison Robot Kit

A compact, sturdy robot that can be programmed in 3 different ways, making it suitable for all ages. Edison is your new robot buddy who will teach you about electronics, programming and robotics in a fun and engaging way. He's equipped with all the sensors, outputs and motors needed to introduce you to the amazing world of robotics. Once you've learned all about Edison's abilities, sensors and controls you can move on to programming him.

### FOR BEGINNERS:

Edison has a barcode scanner to activate one of six inbuilt programs, including line following, clap controlled driving and obstacle avoidance.

### FOR INTERMEDIATE:

EdBlocks is a drag-and-drop block based programming language and can run in a browser. EdWare is the next level up from EdBlocks, with the simplicity of drag-and-drop & more features.

### FOR ADVANCED:

EdPy is the hardcore programming option for those who want to take their Edison to the limit. Requires 4xAAA batteries (not included).



	CAT.	Qty 1+	Qty 3+	Qty 6+
MeetEdison Robot Kit	KR-9210	\$99.95	\$89.95	\$79.95

### MEET EDISON ROBOT SPARE PARTS KIT

This collection of spare parts for the MeetEdison robot has all the removable parts, so there's no need to panic if you lose a bit! It also includes a sachet of silicon grease to keep your robot rolling smoothly.

### Includes:

- 1 x New EdComm cable
- 1 x Battery door (including springs)
- 1 x Clear skid
- 2 x Wheels
- 2 x Tyres
- 4 x Gear shafts
- 4 x Clutch/crown gears
- 4 x Worm gears
- 6 x Allen key/hex head screws
- 1 x Allen key/hex wrench
- 1 x Bag of silicone grease



	CAT.	Qty 1+	Qty 3+	Qty 6+
MeetEdison Robot Spare Parts Kit	KR-9211	\$29.95	\$26.95	\$23.95

### EDMAT A1 VINYL MAT FOR EDISON ROBOT

This durable vinyl mat measures 841 x 594 mm and is a fantastic accessory for your Edison v2 Robot. The EdMat features:

- Barcode and track for line tracing
- Barcode and arena for Sumo wrestle
- Barcode and track for bounce in borders
- Barcodes for clap controlled driving, avoid obstacles and follow torch



	CAT.	Qty 1+	Qty 3+	Qty 6+
EdMat A1 Vinyl Mat for Edison Robot	KR-9213	\$29.95	\$26.95	\$23.95



### EDCREATE - EDISON ROBOT CREATOR'S KIT

The EdCreate Edison robot creator's kit is a 5-in-1 expansion pack construction system. Designed to work with the Edison robot, EdCreate enriches students' STEM education experience through interactive engineering and programming projects.

The EdCreate system can be used with Edison robots to complete five EdBuild projects:

- EdTank
- EdDigger
- EdRoboClaw
- EdCrane
- EdPrinter

The EdBuild projects require progressive levels of coding capabilities, making them a perfect addition to the Edison programming and robotics curriculum.



	CAT.	Qty 1+	Qty 3+	Qty 6+
EdCreate Edison Robot Creator's Kit	KR-9212	\$44.95	\$39.95	\$35.95



## ROBOT KITS

### PC PROGRAMMABLE LINE TRACER KIT

An educational introduction to the world of robotics and programming. Assemble the kit and you are able to use it in two main ways, programming mode or line tracing mode. With the supplied software you are able to program instructions into the robot to navigate its way across the floor. In line tracing mode, simply draw a line on some paper with a thick black marker and the robot will follow the course.

It accomplishes this with two optical sensors, somewhat similar to a common garden bug.

- Assembly time: 2 hours
- Requires: Box cutters, Phillips head screwdriver, long nose pliers (TH-1887)
- Requires 2 x AA batteries
- Software is compatible with Windows XP, Vista, and Windows 7 (Vista users may need to run the software in WinXP Service pack 2 compatibility mode)
- Recommended for ages 12+
- Dimensions: 120(L) x 64(W) x 55(H)mm



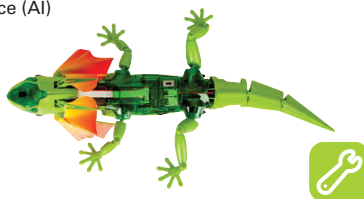
	CAT.	Qty 1+	Qty 3+	Qty 6+
Line Tracer Kit	KJ-8906	\$44.95	\$40.45	\$35.95

### FRILLED LIZARD ROBOT KIT WITH IR SENSOR



A super smart frilled lizard with artificial intelligence. It has an infrared sensor that is programmed to 'escape' or 'follow-me'. Once the infrared sensor is activated in the 'escape' mode the robot will automatically act shocked by spreading its frill, dropping its jaw, illuminates its bicolour LED eyes and will scamper away from you until it reaches a safe place. If the infrared sensor is switched to the 'follow-me' mode using the 2 way function switch, then the robot will assess danger by bluffing the attacker (unfurling and shaking its frill). When the robot does not sense danger it will proceed to follow you like a pet lizard.

- Interactive artificial intelligence (AI)
- Two funway modes
- Infrared sensor
- LED illuminated eyes
- Requires 4 x AAA batteries
- Dimensions: 370mm long
- Suitable for ages 10+



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-8968	\$49.95	\$44.95	\$39.95

## Love building?

CHECK OUT OUR GT-4192 LEGO-COMPATIBLE MINI DRONE. FUN TO BUILD AND FLY! SEE PAGE 521.



### TOBBIE HEXAPOD ROBOT KIT

Tobbie is the new 6-legged robot that you can build. He can walk and spin in any direction, and will beep and flash his eyes while moving around.

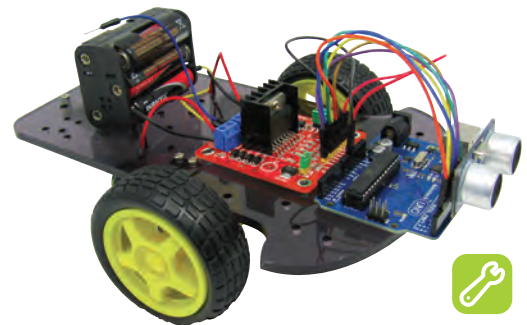
- Follow me mode
- Explore mode
- Six legs for stable walking



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9031	\$49.95	\$44.95	\$39.95

## Make Your Own: Wall Dodging Robot

This little robot is fitted with an ultrasonic sensor, which it uses to help navigate its surroundings. When it detects an object in front of it, it backs up, turns a little and then continues on its way.



See step-by-step instructions at:  
[jaycar.com.au/diy-dodging-robot](http://jaycar.com.au/diy-dodging-robot)

### GYRO ROBOT - 7 EXPERIMENTS

Learn about Gyroscopes and how they are used in the real world. The included colour instruction manual has LEGO® like instructions, making each of the seven projects very easy to build:

- Robo Gyro
- Gyro Compass
- Gyrorector
- Segway
- Rope Walker
- Balance Game
- Flight Simulator
- Suitable for ages: 7+
- Requires 3 x AAA batteries
- Gyro Robot Dimensions: 100(W) x 150(H) x 100(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-8957	\$49.95	\$44.95	\$39.95



## ROBOTIC CONSTRUCTION KITS

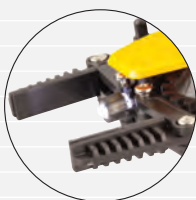
### ROBOT ARM KIT WITH CONTROLLER



This arm is a must for budding robot enthusiasts and operates just like the real thing. It is capable of 5 separate movements and can easily perform complex tasks. Individual control is available for opening and closing the illuminated gripper plus control of wrist, shoulder, elbow and base rotation. The arm is supplied as a kit of parts and makes an excellent project for anyone interested in robotic construction basic electrical connections.

- Suitable for ages 12+

SPECIFICATIONS	KJ-8916
Max Lift Capacity	100g
Gripper Opening	43mm
Maximum Reach	320mm
Wrist Movement	120°
Elbow Movement	300°
Shoulder Movement	180°
Base Rotation	270°
Requires	4 x D cells
Base Dimensions	225(L) x 160(W) x 40(H)mm



### USB INTERFACE KIT FOR KJ-8916

Add computer control via USB to your Robotic Arm. The kit includes everything you need - interface cable, pre-built PCB, enclosure and software for controlling function. You can use a keyboard or mouse to have real-time control of the robotic arm, or you can program, edit and load individual functions and movements, just like a real industrial robot. The commands are saved just like a normal computer file to be loaded and used later.

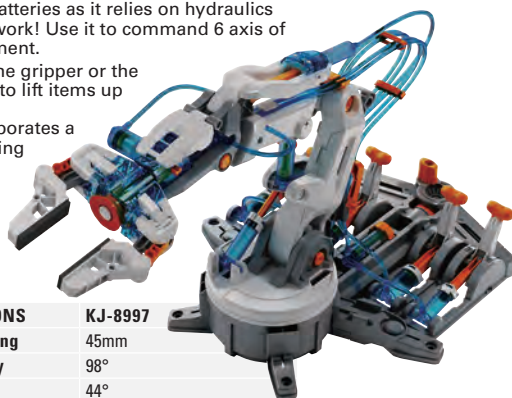


	CAT.	Qty 1+	Qty 3+	Qty 6+
Robot Arm with Controller	KJ-8916	\$69.95	\$62.95	\$55.95
USB Interface Kit	KJ-8917	\$49.95	\$44.95	\$39.95

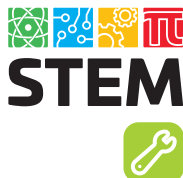
### HYDRAULIC ROBOT ARM KIT

This Robot arm has no motors and does not require any batteries as it relies on hydraulics to do all the work! Use it to command 6 axis of varied movement.

- Use either the gripper or the suction cup to lift items up to 50g
- It also incorporates a built in braking system!



SPECIFICATIONS	KJ-8997
Gripper Opening	45mm
Wrist Mobility	98°
Elbow Range	44°
Base Rotation	270°
Shoulder Motion	45°
Vertical Reach	400mm
Horizontal Reach	300mm
Base Diameter	100mm
Arm Length	260mm
Shoulder Height	190mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-8997	\$59.95	\$53.95	\$47.95

### 3 IN 1 ALL TERRAIN TRACKED ROBOT



There are a lot of parts to assemble in this kit, including the hard-wire remote control. You do, however end up with a fantastic piece of robotic gear. It is primarily a terrestrial 6 track (i.e. 3 separate tractor-crawlers each side) unit. The crawlers can be reconfigured to operate as grippers, or even as a forklift type mechanism. You will need lots of time to put this thing together, but it will be a pleasure as the 50 page instruction manual is superb with dozens of good old-fashioned line drawings, which are still the best for clarity. There is very little electronics (indeed none really) but a tremendous amount of mechanical assembly. Electric motors are included.

This kit could form the basis of a sophisticated robotic platform with the addition of feedback systems, much of which is in the Jaycar catalogue.

- It would make a fabulous gift for a very bright 13+ year old
- Batteries AA x 4 are extra
- Carton dimensions 40(W) x 30(D) x 90(L)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
3 in 1 All Terrain	KJ-8918	\$59.95	\$53.95	\$47.95

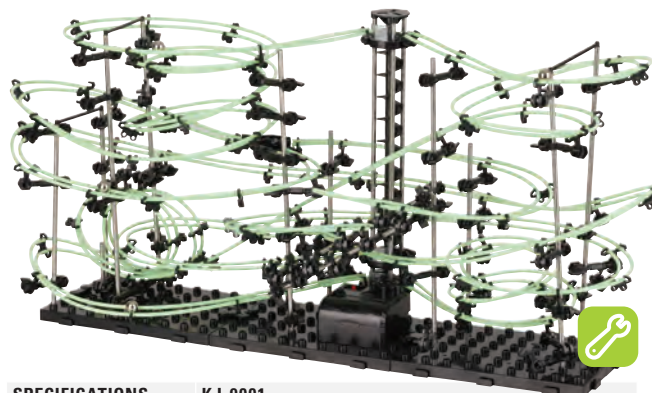
## CONSTRUCTION KITS

### SPACE RAIL CONSTRUCTION KIT - GLOW IN THE DARK

This is the big brother of the space rail kits, to make a HUGE 11m running track! The spiral "elevator" lifts the marbles up to the top of the rail, and gravity takes care of the rest. It's entertaining, and a great lesson in physics. If you don't get the angles of the track right, the marbles won't make the journey! Hours of entertainment, and virtually unlimited track possibilities! Once you get it right though, they'll keep going around and around until you stop them (usually to make changes to the track)!

Supplied with loads of pieces (488 in total) to make an 11m running track.

- Multi-fit baseboard
- Virtually unlimited design possibilities



SPECIFICATIONS	KJ-9001
Battery	1 x 1.5V (C) Battery
Dimensions	710(L) x 210(W) x 350(H)mm, 1kg

	CAT.	Qty 1+	Qty 3+	Qty 6+
488 Pieces	KJ-9001	\$49.95	\$44.95	\$39.95



## LEARN ABOUT GREEN POWER

### 1.5V 40MA HOBBY SOLAR PANEL

Experiment with solar energy - the energy source of the future. This hobby solar cell module is so small, it could easily be used in your next Arduino® project.

- Connection is via the solder pads on the back
- Dimensions: 30(L) x 21(W) 2.5(H)mm

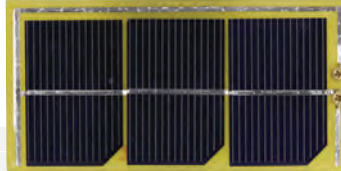


	CAT.	Qty 1+	Qty 2+	Qty 4+
1.5V 40mA	ZM-9015	\$4.95	\$4.70	\$4.45

### HOBBY SOLAR MODULE

Ideal for powering solar projects, hobbies, model solar cars & educational applications.

- 3 cells per module, rated at 1.5V



SPECIFICATIONS	ZM-9012
Open Circuit Voltage	1.5V
Short Circuit Current	500mA
Dimensions	148(L) x 74(W)mm
Weight	33g

	CAT.	Qty 1+	Qty 2+	Qty 4+
	ZM-9012	\$9.95	\$9.45	\$8.95

### SOLAR POWERED GRASSHOPPER KIT

Are your children fascinated with insects? This mini solar powered grasshopper is easy to assemble and will keep them occupied for hours. Runs from sunlight or by a 50W halogen bulb. Small enough to fit in the palm of their hand!

- Suitable for ages 8+
- Dimensions: Approx 40mm long



	CAT.	Qty 1+	Qty 3+	Qty 6+
	GT-3751	\$12.95	\$11.35	\$10.35

### 6 IN 1 SOLAR EDUCATIONAL ROBOT KIT

A hands on experience in the world of solar power. This kit includes all the parts needed to construct up to six different projects. Choose between a robot, helicopter, plane, windmill, water skier or even a three wheeler! Don't even worry about screws, everything snaps together for easy assembly and its all solar powered so no batteries are required. For the best results, use it in direct sunlight. For cloudy days use a 50W halogen light.

- Suitable for ages 10+



SPECIFICATIONS	KJ-8936
Dimensions (Approx)	
Windmill	185 x 185 x 190mm
Helicopter	234mm
Water Skier	140 x 75 x 95mm
Three Wheeler	65 x 50 x 60mm
Robot	50 x 85 x 45mm
Plane	185 x 185 x 130mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
6 in 1	KJ-8936	\$12.95	\$11.35	\$10.35

### 6-IN-1 SOLAR ROBOT

This fantastic DIY kit for the kids is super fun and captures the imagination of the young ones with everyday household material. Build wacky robots out of a coke can, a water bottle or wasted CDs, and even better, all of them can be powered by the sunlight using mini solar panels. A great toy to play, learn, and encourage awareness of the environment.

#### 6 Robots to build:

- Drummer Robot
- Street Roller
- Flying Bird
- Bottle Yacht
- Walking Robot
- CD Racer
- Suitable for ages 10+
- No batteries required (can not included)



	CAT.	Qty 1+	Qty 3+	Qty 6+
6 in 1	KJ-8939	\$19.95	\$17.95	\$15.95

### 6-IN-1 SOLAR EDUCATIONAL KIT

A brilliant kit for any junior eco-scientist. You can build any one of six different projects from the parts in the kit, then make them work by solar power. No tools, soldering or glue required. All the parts snap together with spring terminals for the wiring. The instructions are excellent with extremely clear and concise illustrations detailing every step. The finished projects are solar powered, but can also be powered by the light from a household 50W halogen light.

#### Projects:

- Windmill
- Car
- Dog
- Plane
- Airboat
- Revolving Plane
- Suitable for ages 10+



THOUSANDS SOLD!

	CAT.	Qty 1+	Qty 3+	Qty 6+
6 in 1	KJ-8926	\$14.95	\$13.45	\$11.95

### SOLAR EDUCATIONAL KIT

Experiment with solar energy - the energy source of the future. Our solar educational kit lets you build your own solar models.

#### The kit comes complete with:

- Solar cell module
- Solar energy booklet explaining the why & hows of solar energy
- Small DC motor
- Screws and nuts
- Wire with motor clips
- Colour spinner discs
- Paper aeroplane and bird models
- Plastic turntables with 4 sizes, 5/8", 1", 1.5" and 2"
- Plastic fan spinner
- Suitable for ages 8+



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-6690	\$18.95	\$16.95	\$14.95

### SOLAR BUG KIT

Cute as a button and easy to build, our bug loves to play in the sun. Watch the gears turn to make the legs work. Great for learning about construction, solar, mechanics and electricity.

- Easy to assemble kit teaches about renewable energy
- Easy snap together construction
- Sidecutters needed to trim parts
- Play in the sun to learn about solar power



	CAT.	Qty 1+	Qty 3+	Qty 6+
Solar Bug Kit	KJ-9027	\$19.95	\$17.95	\$15.95

### SOLAR ROVER KIT

At night, Solar Rover rests, but during the day, he's out exploring, with his radar dish scanning the landscape as he prowls on his six wheels. Learn about construction, solar, gears and be inspired to reach for the stars! More advanced than KJ9027 Solar Bug, great for kids interested in space.

- Easy snap together construction
- Sidecutters needed to trim parts
- Play in the sun to learn about solar power
- Transparent windows to view moving parts



	CAT.	Qty 1+	Qty 3+	Qty 6+
Solar Rover Kit	KJ-9026	\$24.95	\$22.45	\$19.95





## LEARN ABOUT GREEN POWER (CONTINUED)

### "T4" TRANSFORMING SOLAR POWERED ROBOT KIT

The basis of this kit is two moulded 'frames' of component parts reminiscent of a plastic model aeroplane kit - about 50 parts! It also has a small (40 x 25mm) solar panel, a tiny electric motor, gears, pinions, etc. It also includes decals. It can 'transform' between a T-Rex or Rhino beetle with moving legs and jaw, Robot with walking legs and moving wheels, and a futuristic miners drilling machine with moving drilling bit and wheels. You will probably need small diagonal pliers to cut out and de-flash all the plastic parts from the frame.

- Robot stands about 100mm tall
- Detailed 34 page assembly manual is also included
- Suitable for ages 8+



	CAT.	Qty 1+	Qty 3+	Qty 6+
4 in 1	KJ-8965	\$24.95	\$22.35	\$19.70

### 12 IN 1 SOLAR HYDRAULIC ROBOT KIT

Here's a kit that's easy to build, and a great way to learn about solar power and hydraulics. There's 12 different models to build, including a crocodile, T-Rex, elephant, monkey, ostrich, scorpion, excavator and forklift.

- 12 different projects to build and rebuild
- Solar electric and hydraulic power
- Each model has many diff animation features, making fascinating play time



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-9030	\$39.95	\$35.95	\$31.95

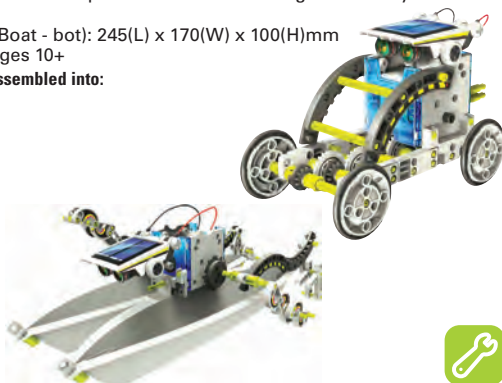
### SOLAR POWERED ROBOT KIT - 14 IN 1 ROBOT KIT

This kit has so many included parts we don't have the time to count them, certainly at least 100 or more. Notable are a solar panel, solar powered electric motor boat hull components, gears etc. This kit can be transformed into 14 different functional robots, some of which admittedly are whimsical, but the kit itself is a fantastic learning experience: Mechanical, educational, scientific & solar physics skills are exercised. Best of all the kit comes with an assembly manual that is LEGO® like in the clarity of description. The manual itself runs to over 80 pages. This kit represents sensational value and is perfect for bright kids 10+ years. (A side cutter is really required to clip all of the parts out of the moulding frames - try TH-1897).

- Dimensions (Boat - bot): 245(L) x 170(W) x 100(H)mm
- Suitable for ages 10+

This kit can be assembled into:

- Turtle-bot
- Beetle-bot
- Boat-bot
- Walker-bot
- Dog-bot
- Wheel-bot
- Row-bot
- Roly Poly-bot
- Auto-bot
- Slither-bot
- Surf-bot
- Zombie-bot
- Crab-bot
- Quadro-bot



	CAT.	Qty 1+	Qty 3+	Qty 6+
14 in 1	KJ-8966	\$49.95	\$44.95	\$39.95

## AIR & SALTWATER EDUCATION KITS

### AIR POWER CONSTRUCTION KIT

Play and learn how air power can move us around. Easy to assemble and easy to play.

Includes:

- Balloon Helicopter
- Balloon Car
- Balloon Hovercraft
- 8 page educational construction guide

Recommended ages 8+



	CAT.	Qty 1+	Qty 3+	Qty 6+
Air Power Construction Kit	KJ-9023	\$6.95	\$6.25	\$5.55

### AIR POWER CAR PROJECT KIT

Great for learning about air pressure and how its powers can be harnessed. Scientific Guide book provides structured experiments and learning. Have a competition and see how fast you can make it go!

- Great set of parts for building your own air-powered project
- Foam star show effects of increasing pressure

Recommended ages 6+



	CAT.	Qty 1+	Qty 3+	Qty 6+
Air Power Car Project Kit	KJ-9025	\$6.95	\$6.25	\$5.55

### AIR POWER ENGINE CAR KIT

A green powered car! No batteries or motors required and it is not even subject to weather conditions like its solar powered counterparts. This futuristic car kit operates entirely using air, and it travels up to 80m on one single tank. This kit balances the fun and learning perfectly. A built-in hand pump with pressure meter is built in the car for easy operation and also as an indicator in measuring how volume of air is collected into the tank. Build this fun and educational kit and discover and learn about air pressure, pumps, valves, transfer of energy and green power, all that with the thrill of a speedy car!

- Dimensions: 190(L) x 160(W) x 290(H)mm
- Suitable for ages 10+



	CAT.	Qty 1+	Qty 3+	Qty 6+
	KJ-8967	\$49.95	\$44.95	\$39.95

### SALT WATER FUEL CELL ENGINE CAR KIT

An entertaining educational kit demonstrating the concept of a salt powered automotive engine. It gives the next generation a look at alternative means of propelling cars of the future. It works with a combination of salt water and magnesium plates. When salt water is added it dissolves the magnesium to form hydrogen which is attracted to the cathode creating a flow of electrons. A detailed step by step assembly manual for connecting the myriad of components is included and the car engine can be configured as a V8 or flat engine. The cylinders also move up and down as the car moves forward. The finished vehicle is 4 wheel drive and the body will twist as it navigates its way over small pebbles and bumps. Watch a demonstration video on our website. You may require the use of a side cutter and flat/Phillips head screwdrivers.

- Assembly time: 3 hours
- Suitable for ages 8+
- Dimensions: 120(L) x 100(W) x 91(H)mm



Ramp not included.

	CAT.	Qty 1+	Qty 3+	Qty 6+
Salt Water Fuel Cell Engine Car Kit	KJ-8960	\$24.95	\$22.35	\$19.70
Spare Cartridge	KJ-8961	\$6.95	\$6.25	\$5.50

## ELECTRONICS CIRCUIT PROJECTS

### CHIBITRONICS LED STICKERS STARTER KIT

Chibitronics Chibi Lights Circuit Stickers are a creative and fun way to learn electronics. Circuit stickers are LED circuits on peel-and-stick stickers. Build circuits without soldering, plugging wires, or clips. Instead, use the stickers with conductive tapes to draw circuits on paper and other crafts. Learn to build circuits and create interactive artwork. It's easy, fun, safe and creative.

#### Product Details:

- Learn and create electronics through craft with Circuit stickers
- It's Fun and Safe to use. No Soldering or wires required, simply use stickers with conductive tape to draw circuits on paper
- Peel-and-stick circuits can be added to any sticker-friendly surface; paper, fabric, plastic, the sky's the limit
- Includes illustrated Circuit Sticker Sketchbook that guides you through five circuit concepts including parallel circuits, switches and resistance-based sensors
- Every activity comes with a circuit theory lesson, a template with drawing activity and an open-ended activity for you to design and create your own circuits

Recommended Age 13+

#### Kit includes:

- 12x Chibitronics Chibi Lights (6 white, 2 Yellow, 2 Red, 2 blue)
- 1x Circuit Sticker Sketchbook
- 2x CR2032 Lithium Batteries
- 2x Clips
- 1x 5mt Length Copper Tape



	CAT.	Qty 1+	Qty 3+	Qty 6+
LED Stickers Starter Kit	KJ-9330	\$49.95	\$44.95	\$39.95

### CIRCUIT SCRIBE MAKER KIT

Draw Circuits Learning Kits by Circuit Scribe Draw circuits with the conductive ink pen and then watch them come to life. Learn electronics fundamentals with examples and templates in the detailed sketchbooks. Each kit includes magnetic modules, LEDs and components that work with the pin adaptor module. Modules are magnetically attached to a steel backing sheet, completing the circuit. Easy-to-use.

Spare Circuit Scribe Conductive Ink Pens also available: KJ-9320

#### KJ-9310 - MAKER KIT - 17 PIECE

Contains a Circuit Scribe pen, eleven modules, battery, workbook and other accessories to take your circuit sketches to the next level with inputs, outputs, and signal processing in your circuits. 17pc.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Circuit Scribe Maker Kit	KJ-9310	\$119.00	\$106.95	\$94.95

### DRAW CIRCUITS CIRCUIT SCRIBE BASIC KIT

Draw Circuits Learning Kits by Circuit Scribe Draw circuits with the conductive ink pen and then watch them come to life. Learn electronics fundamentals with examples and templates in the detailed sketchbooks. Each kit includes magnetic modules, LEDs and components that work with the pin adaptor module. Modules are magnetically attached to a steel backing sheet, completing the circuit. Easy-to-use. Spare Circuit Scribe Conductive Ink Pens also available: KJ-9320

#### KJ-9340 - BASIC KIT - 11 PIECE

Contains a Circuit Scribe pen, six modules, battery, workbook and accessories to get started. Explore basic circuit concepts like conductivity and work up to creating a touch-sensitive circuit using the NPN transistor. 11pc.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Circuit Scribe Basic Kit	KJ-9340	\$69.95	\$62.95	\$55.95

### DRAW CIRCUITS CIRCUIT SCRIBE ULTIMATE KIT

Draw Circuits Learning Kits by Circuit Scribe Draw circuits with the conductive ink pen and then watch them come to life. Learn electronics fundamentals with examples and templates in the detailed sketchbooks. Each kit includes magnetic modules, LEDs and components that work with the pin adaptor module. Modules are magnetically attached to a steel backing sheet, completing the circuit. Easy-to-use.

Spare Circuit Scribe Conductive Ink Pens also available: KJ-9320

#### KJ-9300 - ULTIMATE KIT - 32 PIECE

For more complex, robust circuits, which you can hook up to programmable platforms like Arduino® (Arduino® not included). The kit includes everything from the Maker Kit plus extra LEDs, switches, motor and magnetic jumper connection cables. 32pc.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Circuit Scribe Ultimate Kit	KJ-9300	\$149.00	\$133.95	\$118.95

### CIRCUIT SCRIBE SPARE CONDUCTIVE INK PEN

Spare Circuit Scribe ink pen to suit Circuit Scribe Kits.

Note: When not in use store sideways or tip down.

	CAT.	Qty 1+	Qty 3+	Qty 6+
Spare Conductive Ink Pen	KJ-9320	\$34.95	\$30.95	\$27.95

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!



## Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.





## Snap-On Projects & Kits:

These kits allow children 6 years and older to learn about electronics whilst having fun. All of the brightly coloured parts simply snap together without any need for screws or soldering. The parts can be easily taken apart to be reused for other experiments over and over again.

- Suitable for ages 6+
- No tools or soldering required
- Powered by AA batteries (Sold separately)
- Include coloured instruction manuals

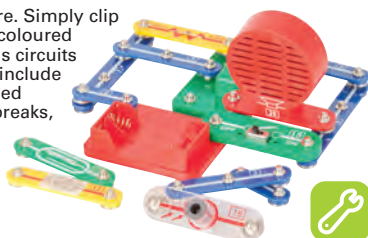


## STEM

### BURGLAR ALARM SNAP-ON ELECTRONIC PROJECT KIT

Create burglar alarms and more. Simply clip the clearly marked and bright coloured pieces together to learn various circuits designs. Some of the projects include anti-theft alarm that fires themed warning sounds when circuit breaks, door/window alarm using a dry reed switch and even a rain alarm.

- Requires 2 x AA batteries

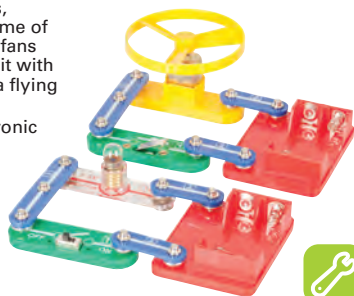


CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8974	\$15.95	\$13.95	\$12.45

### 8-IN-1 SNAP-ON ELECTRONIC PROJECT KIT

Various experiments on circuits, motors, switches and more. Some of the projects include lamps and fans in both series and parallel circuit with variable controls; there is also a flying saucer project that really flies.

- Learn whilst building 14 electronic experiments
- Requires 2 x AA batteries

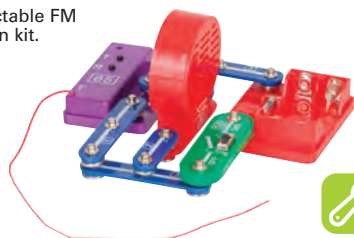


CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8976	\$13.95	\$12.55	\$11.15

### FM RADIO SNAP-ON ELECTRONIC PROJECT KIT

Create a fully functional selectable FM radio with this simple snap on kit.

- Requires 2 x AA batteries

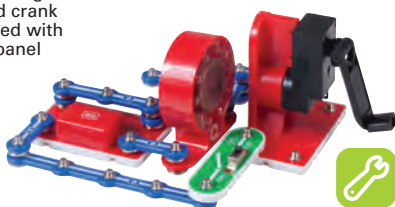


CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8978	\$14.95	\$13.45	\$11.95

### 24-IN-1 SNAP ON ELECTRONIC PROJECT KIT

Build up to 24 projects including a solar coloured lamp, hand crank fan and police siren. Supplied with dynamo hand crank, solar panel and base board.

- Ages 6+



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8987	\$49.95	\$44.95	\$39.95

### ELECTRONIC PROJECT SNAP-ON KIT WITH 80 EXPERIMENTS

Features 80 projects which demonstrate various theories of electronics. A great educational tool for primary age school students that will stimulate their neural pathways as they read and construct an array of devices that use circuits, switches, electric motors, LEDs and more. Some of the projects include magnets or switch controlled electric fans, switch controlled LEDs, switching multi-directional electric motor, sound effect machine that will output machine gun fire, police car siren and much more.

- Learn whilst building over 80 electronic experiments
- Requires 2 x AA batteries
- Package dimensions: 265(L) x 205(W) x 35(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8970	\$24.95	\$22.45	\$19.95

### CAR & BOAT SNAP-ON ELECTRONIC PROJECT KIT WITH 50 EXPERIMENTS

Simple snap together project kit allows you to create a car or a boat that will move! Bright colour pieces and no need to screw, or use adhesives. Great little kit for teaching simple electronic principles to eager minds. Projects include magnet controlled lamp or fan, air propelled car, and underwater or air propelled boat.

- Learn whilst building over 50 electronic experiments
- Requires 2 x AA batteries
- Suitable for ages 6+
- Package dimensions: 460(L) x 330(W) x 40(D)mm



CAT.	Qty 1+	Qty 3+
KJ-8972	\$34.95	\$31.45

### 698-IN-1 SNAP ON ELECTRONIC PROJECT KIT

This massive experimenters kit guides you through 698 different experiments. Yes, that's correct - 698 different experiments! It uses a unique baseboard and snap-together system so you can explore the world of electronic circuits without any tools, soldering, or experience! Build a light sensitive alarm clock, an electronic birthday candle, an electronic organ, and so much more. All using low voltage battery power, so it's safe for ages 8+. Requires 4 x AA batteries, not supplied.

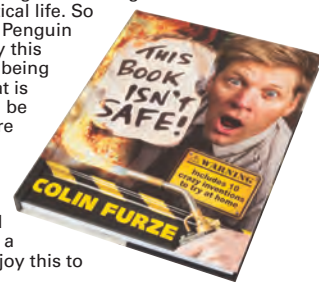
- Snap together - no tools required
- Safe for 8+
- 698 different experiments
- Battery: 4 x AA batteries (not included)
- Weight: 860g
- Dimensions: 460(L) x 301(W) x 55(H)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8985	\$69.95	\$62.95	\$55.95

### THIS BOOK ISN'T SAFE - COLIN FURZE

In the words of Youtuber and Author Colin Furze: In my 10 years making crazy inventions and madcap projects on the internet I've been inspiring people young and old to get into engineering and take up a more practical life. So with this in mind I've teamed up with Penguin to create a book for kids that will carry this inspiration and help them work up to being confident with tools and materials that is the foundation of what I do. There will be 10 projects that get progressively more challenging for you to create at home that are low cost and need only basic tools. As well as these DIY projects the book will cover some of my favourite inventions with pictures and cartoons so even those that don't like a lot of words (my younger self) can enjoy this to the max.

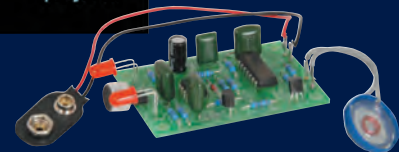
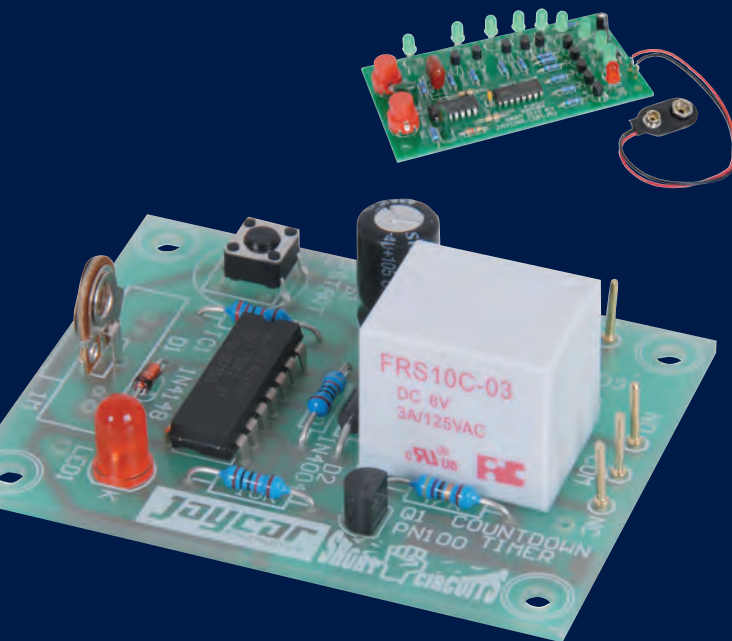


CAT.	Qty 1+
This Book Isn't Safe • Colin Furze	BM-7146 \$29.95

# Learning electronics is fun!

## Short Circuits Series: What's it all about?

Since its inception, the Short Circuits learning system has become the preferred platform from which students can confidently tackle the various levels of modern electronics. The system consists of the Short Circuits books and their own series of construction projects. Although written with beginners in mind, the books are incredibly thorough without being intimidating and most importantly, they're written with an emphasis on FUN! All books in the series are geared towards specific levels of electronics knowledge.



## A Learning System:

All books are lavishly illustrated and collectively boast over 70 exciting projects; each project logically follows from the previous one so while having enormous fun for the constructors knowledge is steadily progressing without mysterious gaps. The operation of each project is fully described, along with full descriptions of the components you will encounter along the way. To maximise the fun and acquisition of learning, constructors are also shown how to modify and experiment with component changes and how they will change the performance of the project. Explanations of all technical terms are given in plain English - the books are a great read themselves.

Free downloadable Short Circuits books now available:  
[www.jaycar.com/short-circuits](http://www.jaycar.com/short-circuits)



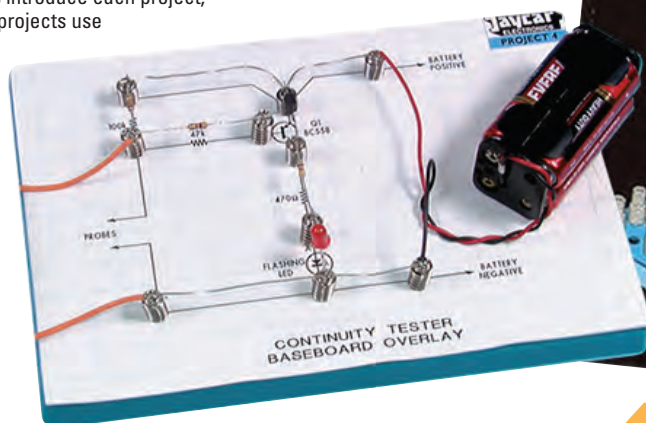
## Short Circuits Volume 1 - Second Edition:

With Short Circuits Volume 1, we give the option of buying the book on its own, or together with the accompanying kit that contains the components for each of the 20-odd projects described in the book. Some of the exciting projects include a Police Siren, Electronic Organ, Sound Effects Unit, Light Chaser and a Solar Powered Radio (an inexpensive solar panel is optional and available separately). Of course, many more projects are included! Remember, no prior knowledge of electronics is needed and the projects are totally safe. This volume will teach constructors everything they need to get started in electronics and is suitable for ages 8+. Kits contain small parts.

- Circuit diagrams included for each project
- Safe 6 volt system
- Techtalk discusses circuit operation and is written in a clear, easy to understand language
- Component layout on the special breadboard is clearly illustrated for each project
- Fun characters introduce each project, explaining the projects use

**96 FULL  
COLOUR  
PAGES**  
**OVER 20  
PROJECTS**

**\$9.95**



### SHORT CIRCUITS - VOLUME 1 BOOK - SECOND EDITION

Our first book in the series uses a learning system designed around a baseboard, which you use to mount their projects. All components are connected together by our exclusive spring terminals. They are extremely easy to use, and don't even require a screwdriver.

At the back of the book is a paper template for each project, which attach to the baseboard. The springs are then inserted into the baseboard according to the locations shown on the template. The template then shows EXACTLY where each component goes, making project success almost a certainty.

Each project is lavishly illustrated with over 100 drawings and diagrams. Each project features components which are "state of the art". The projects are fun to build but perhaps more importantly, are relevant to the electronics scene in the new millennium. It is a great read in itself and far superior to cheap alternatives.

Each of the 20+ projects is powered from batteries and requires absolutely no soldering, making this learning system safe for ages 8+.

- Soft cover - 96 pages
- 205 x 275mm

#### PROJECT KIT

The complete kit of parts available separately. This includes plastic baseboard, spring connectors and all components needed to complete every project in the book.

No instructions are supplied with this kit as they come in the book which is available separately.

- Additional Hookup wire can be purchased (WH-3025)
- Optional Solar Cell Power Supply for project #16 is extra Cat ZM-9020 (batteries are also extra)
- 6VDC (4 X AA)

#### BOOK & PROJECT KIT

Apart from the book, we supply the baseboard, plenty of spring terminals and ALL the components required to build every project in the book, INCLUDING the bonus projects!

- Additional hookup wire can be purchased (WH-3025)
- Optional Solar Cell Power Supply for project #16 is extra Cat ZM-9020 (batteries are also extra)
- 6VDC (4 X AA)



CAT.	Qty 1+	Qty 3+
BJ-8502	\$9.95	
KJ-8504	\$39.95	\$35.95
KJ-8502	\$44.95	\$39.95

Grab your FREE PDF download:  
[www.jaycar.com.au/short-circuits](http://www.jaycar.com.au/short-circuits)

**It's all very well done, and I'm not surprised that the Short Circuits book and matching kit of parts have proved very popular with schools and hobbyists. Together they provide an excellent way for newcomers to 'dip their toes' into the wonders of electronics, in an enjoyable and hassle-free way, and of course it has all been designed and published right here in Australia - a credit to all concerned.**

**- ELECTRONICS AUSTRALIA**

Some of the exciting projects that you can build from this book include:

- Short circuit tester
- Police siren
- Sound effects unit
- Solar powered radio
- Computer type circuits
- Magic Eye light alarm
- Electronic organ
- Light chaser
- 3 types of transistor amps
- And many many more

## Short Circuits Volume 2:

Once constructors have mastered the art of assembling a circuit with springs they will want to tackle projects that are more complex. The benefit of spring termination falls away once they get into projects that have over, say, 20 parts. In addition to this, projects that work on radio frequency, or RF for short, don't like springs as they start to act like little antennae all over the place! So it's time to graduate to the heart of modern electronics - the printed circuit board. This simple device fulfils the function of mounting board & circuit wiring in one. The critical element of success in printed circuit board - or PCB for short - assembly is good soldering. Soldering is not for 8 year olds but its fine if they are older or are under adult supervision. In Short Circuits II we teach the reader how to solder. We teach you a lot more as well:

- How to use a Multimeter
- What tools will be needed.
- What sort of workspace is needed
- How the circuit works (Tech talk)
- What to do next
- Making the circuit work in the real world

*You will need a 9V battery to complete these projects. See SB-2423 on page 382*

### SHORT CIRCUITS - VOLUME 2

Once constructors have the basic skills and knowledge either from a School Design and Technology course, or tackling Short Circuits Vol 1, you can now have some real fun! With this book (and associated project packs available separately - see following pages) they can make such things as a mini strobe light, police siren, mini organ, a couple of powerful radio transmitters, an FM radio - even a 'Knight Rider' scanner!!

All components are fully described and explained, along with tutorials on soldering iron and multimeter use.

All projects are safe and battery powered.

- Soft cover - full colour 148 pages
- 205 x 275mm



CAT.	Qty 1+
BJ-8504	\$12.95



148 FULL  
COLOUR  
PAGES

OVER 20  
PROJECTS

**\$12.95**

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[www.jaycar.com.au/short-circuits](http://www.jaycar.com.au/short-circuits)

## Short Circuits Volume 3 - Second Edition:

Like our Volumes 1 & 2 book, Short Circuits Volume 3 is sold independently to each of the 30-odd projects. Some of the projects constructors will build include a Guitar Sustain Unit, a Universal Timer, Car Alarm, Two Lamp Flasher plus many more! There's even a project that demonstrates how constructors can use your computer to interface to the real world via a computer's parallel port. Building the projects described in Volume 3 will provide constructors with the confidence needed to tackle more complex projects, such as those described in the various electronics hobby magazines.

- Step by step instructions show you how to assemble each project
- Techtalk explains the operation of each circuit in detail, to help constructors gain a thorough knowledge of the "Building Blocks" used in circuit design
- "What To Do Next" shows constructors how to modify or further improve your project
- Basic circuit theory is provided to increase constructors level of understanding

### SHORT CIRCUITS - VOLUME 3

#### SECOND EDITION

This is the definitive electronics training manual and is far more than the weekend "fun-type", superficial approach to electronics. This volume presents more than 30 individual printed circuit board-based construction projects. Naturally, soldering techniques are discussed in detail, as is the proper use of a digital multimeter. We describe projects that take from just 20 minutes to make (such as project 2, Ding Dong Doorbell), to a fully fledged Guitar Sustain which may take several hours to complete, but will give constructors an accessory that can last a lifetime. Each project contains a full technical description, with experimental changes to each circuit also explained. After constructors have built any or all of the described projects, there is no reason why they would not be able to successfully tackle any of the construction projects published in the electronics magazines. This book will end up giving them the knowledge and skill that will elevate them into a fully fledged constructor!

- Soft cover - full colour 128 pages
- 205 x 275mm



CAT.	Qty 1+
BJ-8505	\$14.95



128 FULL  
COLOUR  
PAGES

OVER 30  
PROJECTS

**\$14.95**

Grab your FREE PDF download:  
[www.jaycar.com.au/short-circuits](http://www.jaycar.com.au/short-circuits)

**Note: Project packs do not include instructions. Constructors can purchase the book, buy a set of instructions for each project separately or download the book as a PDF for free from our website: [www.jaycar.com.au/short-circuits](http://www.jaycar.com.au/short-circuits)**

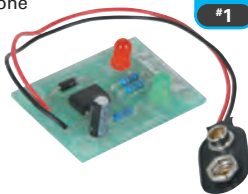


## SHORT CIRCUITS 2 PROJECTS

### SC2 PROJECT - RED/GREEN FLASHER

It flashes two LEDs (light emitting diodes) - one red and the other green - alternately, a bit like the light on a police car. A great way to learn how a 555 Timer IC works.

- PCB & all parts supplied
- Requires 9V battery
- Instructions NOT included. See KJ-8201 or our full colour project book BJ-8504
- Recommended Box - UB5 HB-6015 \$2.95



SC2 PROJECT #1

	CAT.	Qty 1+	Qty 3+
PCB: 43 x 30mm	KJ-8200	\$8.95	\$8.05
Instructions	KJ-8201	\$2.50	

### SC2 PROJECT - COUNTDOWN TIMER

This neat project enables you to dial a time you want to elapse before you want something to happen, say the exposure of a camera shutter or an electrically operated door to stay open. At the end of the timed period (seconds to many minutes) a relay is energized which can switch something on or off. PCB and all parts supplied, including relay.

- Requires 9V battery
- Instructions NOT included. See KJ-8203 or our full colour project book BJ-8504
- Recommended Box - UB5 HB-6015 \$2.95



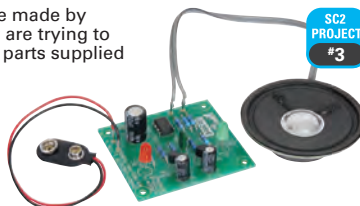
SC2 PROJECT #2

	CAT.	Qty 1+	Qty 3+
PCB: 61 x 47mm	KJ-8202	\$14.95	\$13.35
Instructions	KJ-8203	\$2.50	

### SC2 PROJECT - HEE-HAW SIREN WITH FLASHING LIGHT

This project will make the noise made by emergency vehicles when they are trying to get through traffic. PCB and all parts supplied including flashing LED.

- Requires 9V battery
- Instructions NOT included. See KJ-8205 or our full colour project book BJ-8504
- Recommended Box - UB5 HB-6015 \$2.95



SC2 PROJECT #3

	CAT.	Qty 1+	Qty 3+
PCB: 57 x 51mm	KJ-8204	\$11.95	\$10.45
Instructions	KJ-8205	\$2.50	

### SC2 PROJECT - MINI STROBE LIGHT

No, this unit won't fill a disco with blinding white light. Those things are dangerous and run straight off 240V. This one runs off a 9V battery and gives a surprisingly intense white light especially in darkness. Uses state-of-the-art LED. PCB and parts including LED supplied.

- Requires 9V battery
- Instructions NOT included. See KJ-8207 or our full colour project book BJ-8504
- Recommended Box - UB5 HB-6015 \$2.95



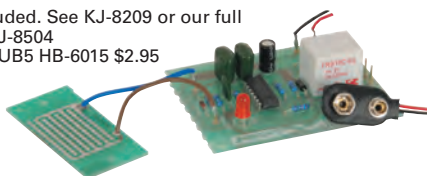
SC2 PROJECT #4

	CAT.	Qty 1+	Qty 3+
PCB: 61 x 45mm	KJ-8206	\$19.95	\$17.95
Instructions	KJ-8207	\$2.50	

### SC2 PROJECT - MINI STROBE LIGHT

This project allows you to turn things on or off simply by touching a small sensor pad with your finger. This could include operating an alarm, water pump, hi-fi speakers, or any other low voltage gadget.

- PCBs & all parts including the relay supplied
- Requires 9V battery
- Instructions NOT included. See KJ-8209 or our full colour project book BJ-8504
- Recommended Box - UB5 HB-6015 \$2.95



SC2 PROJECT #5

	CAT.	Qty 1+	Qty 3+
PCB: 75 x 26mm	KJ-8208	\$15.95	\$13.95
Instructions	KJ-8209	\$2.50	

### SC2 PROJECT - DROUGHT ALARM

Well, not really a big drought. This will test the soil moisture of a favourite pot plant and an alarm will sound if the soil gets too dry.

- Instructions NOT included. See KJ-8211 or our full colour project book BJ-8504
- PCB, speaker & components
- Requires 9V battery
- Recommended Box - UB3 HB-6013 \$3.95



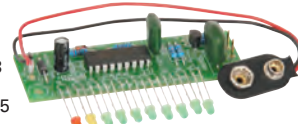
SC2 PROJECT #6

	CAT.	Qty 1+	Qty 3+
PCB: 63 x 57mm	KJ-8210	\$15.95	\$13.95
Instructions	KJ-8211	\$2.50	

### SC2 PROJECT - AUDIO LEVEL DISPLAY

Make your own fancy volume level display you see on DJ mixing desks where the columns of light dance up and down with the music. Connect it to the output of your CD, tape player or radio. Build two of them for displays on your stereo hi-fi system.

- PCB and all parts supplied
- Requires 9V battery (not included)
- Instructions NOT included. See KJ-8213 or our full colour project book BJ-8504
- Recommended Box - UB5 HB-6015 \$2.95



SC2 PROJECT #7

	CAT.	Qty 1+	Qty 3+
PCB: 75 x 26mm	KJ-8212	\$15.95	\$13.95
Instructions	KJ-8213	\$2.50	

### SC2 PROJECT - ELECTRONIC ORGAN

You can play simple tunes easily once you have built this project! The organ keyboard is actually part of the printed circuit board. It even has vibrato for extra realism. Includes PCB and all board components.

- Requires 9V battery
- Instructions NOT included. See KJ-8215 or our full colour project book BJ-8504
- Recommended Box - UB1 HB-6011 \$4.45



SC2 PROJECT #8

	CAT.	Qty 1+	Qty 3+
PCB: 133 x 31mm, 133 x 51mm	KJ-8214	\$24.95	\$22.45
Instructions	KJ-8215	\$2.50	

### SC2 PROJECT - NO BRAINER AMPLIFIER

This amp is so easy to build, it's a no brainer! It will, however, give a powerful output to bring your MP3 player or sound card alive! Speaker supplied. Two required for stereo. PCB and all relevant parts included.

- Requires 9V battery
- Instructions NOT included. See KJ-8217 or our full colour project book BJ-8504
- Recommended Box - UB3 HB-6013 \$3.95



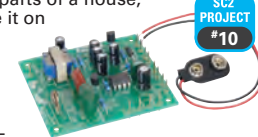
SC2 PROJECT #9

	CAT.	Qty 1+	Qty 3+
PCB: 64 x 57mm	KJ-8216	\$15.95	\$13.95
Instructions	KJ-8217	\$2.50	

### SC2 PROJECT - BEAM ME UP SCOTTY SIMPLE INTERCOM

Enables you to talk (i.e. not shout) between parts of a house, or a house and a garage. You can even leave it on to monitor a baby's room. All parts supplied including PCB and 6-metres of connecting wire. Requires 9V battery.

- Instructions NOT included. See KJ-8219 or our full colour project book BJ-8504
- Recommended Box - UB3 x3 HB-6013 \$3.95



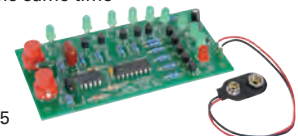
SC2 PROJECT #10

	CAT.	Qty 1+	Qty 3+
PCB: 63 x 57mm	KJ-8218	\$29.95	\$26.95
Instructions	KJ-8219	\$2.50	

### SC2 PROJECT - SKEET SHOOT GAME

Here's a fun way to test your hand-eye coordination. The game sends a burst-of-light 'skeet' up along a string of ten LEDs, try to 'hit' it by pressing the FIRE button at the same time as it reaches the red LED.

- Instructions NOT included. See KJ-8221 or our full colour project book BJ-8504
- PCB, LEDs and components
- Requires 9V battery\*
- Recommended Box - UB3 HB-6013 \$3.95



SC2 PROJECT #11

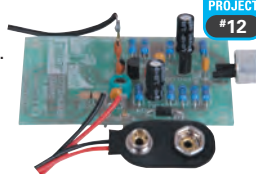
	CAT.	Qty 1+	Qty 3+
PCB: 107 x 57mm	KJ-8220	\$17.95	\$15.95
Instructions	KJ-8221	\$2.50	

## SHORT CIRCUITS 2 PROJECTS (CONTINUED)

### SC2 PROJECT - SIMPLE FM BUG

Small portable FM microphone. Works surprisingly well. Use it as a baby minder/monitor as well. PCB and all parts supplied.

- Requires 9V battery
- Instructions NOT included
- See KJ-8231 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB3 HB-6013 \$3.95



SC2  
PROJECT  
#12

	CAT.	Qty 1+	Qty 3+
PCB: 59 x 41mm	KJ-8230	\$14.95	\$13.35
Instructions	KJ-8231	\$2.50	

### SC2 PROJECT - METRONOME

This neat little metronome does everything that a traditional metronome does. It produces an adjustable 'tick' sound to help you play your music at the right tempo. It also flashes a LED once per bar, to help you get the music's rhythm right as well.

- PCB, speaker and all parts supplied including knobs
- Requires 9V battery
- Instructions NOT included
- See KJ-8233 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB1 HB-6011 \$4.45



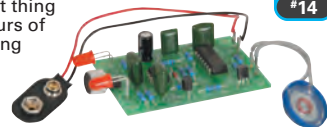
SC2  
PROJECT  
#13

	CAT.	Qty 1+	Qty 3+
PCB: 82 x 82mm	KJ-8232	\$19.95	\$17.95
Instructions	KJ-8233	\$2.50	

### SC2 PROJECT - JIMINY! WHAT'S THAT CRICKET NOISE?

This fun project makes the distinct sound of a cricket when triggered by a hidden microphone. Someone walks into a room, says something and the next thing this loud cricket starts to chirp! Hours of fun. PCB and all other parts including microphone supplied.

- Requires 9V battery
- Instructions NOT included
- See KJ-8225 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB3 HB-6013 \$3.95



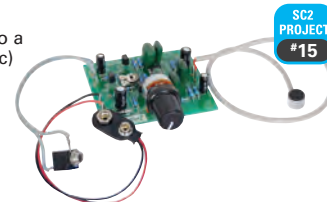
SC2  
PROJECT  
#14

	CAT.	Qty 1+	Qty 3+
PCB: 61 x 45mm	KJ-8224	\$14.95	\$13.35
Instructions	KJ-8225	\$2.50	

### SC2 PROJECT - BIONIC EAR

This project enables you to listen to a conversation (or a bird in a tree, etc) beyond what you would normally hear. It uses the principle of a directional microphone. PCB and parts supplied. A plastic bowl or similar is required for the reflector.

- Requires 9V battery
- Instructions NOT included
- See KJ-8227 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB3 HB-6013 \$3.95



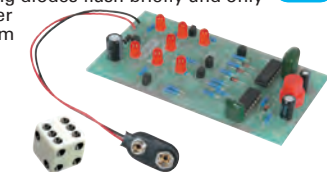
SC2  
PROJECT  
#15

	CAT.	Qty 1+	Qty 3+
PCB: 63 x 57mm	KJ-8226	\$17.95	\$15.95
Instructions	KJ-8227	\$2.50	

### SC2 PROJECT - CASINO! ELECTRONIC DICE

Well dice is really plural and this is just one dice a die. At the press of a button roll 6 light emitting diodes flash briefly and only one stays lit, representing a number between 1 and 6. Truly, truly random and never rolls off the table! PCB and all parts supplied.

- Requires 9V battery
- Instructions NOT included
- See KJ-8223 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB3 HB-6013 \$3.95



SC2  
PROJECT  
#16

	CAT.	Qty 1+	Qty 3+
PCB: 108 x 51mm	KJ-8222	\$15.95	\$13.95
Instructions	KJ-8223	\$2.50	

### SC2 PROJECT - SOUND LIKE A DALEK

This project will change your voice into that metallic sounding robot voice so familiar in the space adventure movies. PCB and parts supplied. Connect it to the no brainer amp and get really scary!

- Requires 9V battery
- Instructions NOT included
- See KJ-8229 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB3 HB-6013 \$3.95



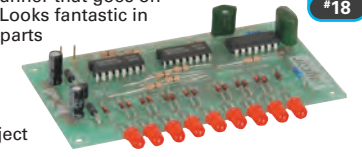
SC2  
PROJECT  
#17

	CAT.	Qty 1+	Qty 3+
PCB: 102 x 57mm	KJ-8228	\$23.95	\$21.35
Instructions	KJ-8229	\$2.50	

### SC2 PROJECT - KNIGHT RIDER LIGHT SCANNER

Now you can make the light scanner that goes on the bonnet of that famous car. Looks fantastic in all sorts of places! PCB and all parts supplied.

- Require 9V battery
- Instructions NOT included
- See KJ-8237 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB3 HB-6013 \$3.95



SC2  
PROJECT  
#18

	CAT.	Qty 1+	Qty 3+
PCB: 102 x 55mm	KJ-8236	\$19.95	\$17.95
Instructions	KJ-8237	\$2.50	

### SC2 PROJECT - EVENT COUNTER - 0 TO 999

This project demonstrates how 3-digit counters work and can be used for real-world counting jobs, like counting laps on a slot car set, etc. An excellent 'hands on' introduction to electronics.

- PCB and all parts supplied
- Require 9V battery
- Instructions NOT included
- See KJ-8235 for individual instructions or full colour project book BJ-8504
- Recommended Box - UB1 HB-6011 \$4.45



SC2  
PROJECT  
#19

	CAT.	Qty 1+	Qty 3+
PCB: 127 x 76mm	KJ-8234	\$27.95	\$24.95
Instructions	KJ-8235	\$2.50	

### SC2 PROJECT - FM RADIO WITH ELECTRONIC TUNING

This is a true state-of-the-art 88-108MHz FM radio with electronic station tuning and powerful amplifier included! It has a voltage regulated power supply and works really well. Your friends won't believe you built it. PCB and all board parts supplied.

- Require 9V battery
- Instructions NOT included
- See KJ-8239 for individual instructions or full colour project book BJ-8504
- Recommended Box - HB-6032 \$7.95



SC2  
PROJECT  
#20

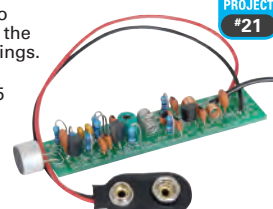
	CAT.	Qty 1+	Qty 3+
PCB: 108 x 51mm	KJ-8238	\$34.95	\$31.45
Instructions	KJ-8239	\$2.50	

### SC2 PROJECT - THREE STAGE FM TRANSMITTER

So stable it could be used as a small radio station. The audience would be limited to the backyard as there are rules about such things.

- A microphone is included
- Recommended Box - UB5 HB-6015 \$2.95

Instructions included in kit.



SC2  
PROJECT  
#21

	CAT.	Qty 1+	Qty 3+	Qty 6+
PCB: 70 x 10mm	KJ-8750	\$19.95	\$17.95	
Recommended Box - UB5	HB-6015	\$2.95	\$2.60	\$2.30

Note: Project packs do not include instructions. Constructors can purchase the book, buy a set of instructions for each project separately or download the book as a PDF for free from our website [www.jaycar.com.au/short-circuits](http://www.jaycar.com.au/short-circuits).



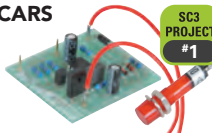
## ▼ SHORT CIRCUITS 3 PROJECTS

### SC3 PROJECT - DASHER FLASHER FOR CARS

This lamp flasher mounts on your car dashboard and starts flashing when the ignition is off. Looks like the real thing. Kit includes PCB, lamp and all components.

- Recommended Box - UB5 HB-6015 \$2.95

	CAT.	Qty 1+	Qty 3+
PCB: 47 x 41mm	KJ-8050	\$11.95	\$10.45
Instructions	KJ-8051	\$2.50	

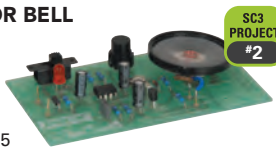


### SC3 PROJECT - DING DONG DOOR BELL

Another useful little kit that generates the sound of a classic Ding Dong door bell. Just the thing for your front door. Kit includes PCB, speaker and all components. 12VDC power required.

- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8052	\$14.95	\$13.45
Instructions	KJ-8053	\$2.50	

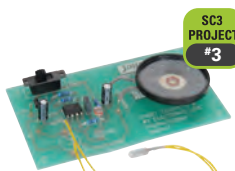


### SC3 PROJECT - ELECTRONIC EYE

Install this kit to monitor traffic on a path or through a doorway. When a person or object breaks the beam the loudspeaker will sound.

- Kit includes PCV, LDR, speaker and all components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 61mm	KJ-8054	\$14.95	\$13.35
Instructions	KJ-8055	\$2.50	



### SC3 PROJECT - SIMPLE FM ALARM

Track moving objects, find the dog when it runs away or even recover your stolen food using an FM radio. This kit transmits a tone over the FM band so that you can track it down using an FM radio. Kit includes PCB, 9V battery and all electronic components. A fun and useful project.

- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8056	\$14.95	\$13.35
Instructions	KJ-8057	\$2.50	



### SC3 PROJECT - INFRARED REMOTE LINK

This can be used as a remote on/off or momentary switch.

- Kit includes PCBs, 9V battery and all electronic components
- Receiver requires 12VDC power
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8058	\$29.95	\$26.95
Instructions	KJ-8059	\$2.50	

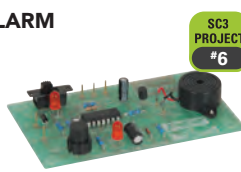


### SC3 PROJECT - SIMPLE INTRUDER ALARM

This simple design features a normally open and normally closed input, 40 second siren duration and triggered LED indication.

- Kit includes PCB, buzzer and electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8060	\$15.95	\$13.95
Instructions	KJ-8061	\$2.50	

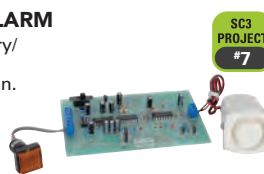


### SC3 PROJECT - SCREAMER CAR ALARM

A more sophisticated alarm including entry/exit delay, flashing deterrent light, soft warning alarm and deafening internal siren. Thieves will make a hasty retreat!

- Kit includes PCB, siren and electronic components
- Recommended Box - UB2 HB-6012 \$6.95

	CAT.	Qty 1+	Qty 3+
PCB: 132 x 88mm	KJ-8062	\$34.95	\$30.95
Instructions	KJ-8063	\$2.50	

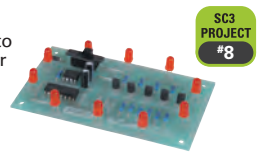


### SC3 PROJECT - LIGHT CHASE

Dazzling display using 10 LEDs that appear to chase each other. Build for a shop, theatre or advertising display.

- Kit includes PCB, LEDs and electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8064	\$13.95	\$12.45
Instructions	KJ-8065	\$2.50	

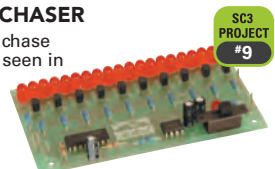


### SC3 PROJECT - LIGHT SCANNER / CHASER

An impressive display using 20 LEDs that chase forward and backward - just like scanners seen in space movies.

- Kit includes PCB, LEDs & all electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8066	\$16.95	\$14.95
Instructions	KJ-8067	\$2.50	

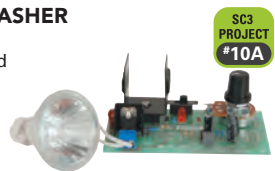


### SC3 PROJECT - REALLY BRIGHT FLASHER

Attract attention with this bright halogen light flasher. The flash rate can be adjusted between 0.5 to 3.5 seconds.

- Kit includes PCB, 12V halogen lamp with base and all electronic components
- 12VAC power required - use MP-3044
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8068	\$26.95	\$23.95
Instructions	KJ-8069	\$2.50	



### SC3 PROJECT - TWO LAMP FLASHER

Alternate flashing halogen lamps with an adjustable flash rate between 1 to 4 seconds.

- Kit includes PCB, two halogen lamps with bases and all electronic components
- 12VAC required - use MP-3044
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8070	\$34.95	\$30.95
Instructions	KJ-8071	\$2.50	



### SC3 PROJECT - THE CHAMP AMPLIFIER

A cheap and handy amplifier that can improve low-level signal sources so they can be heard on headphones or a speaker.

- Kit includes PCB, volume potentiometer and all electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8072	\$17.95	\$15.95
Instructions	KJ-8073	\$2.50	

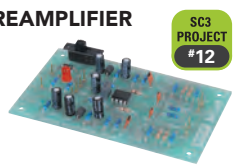


### SC3 PROJECT - UNIVERSAL STEREO PREAMPLIFIER

If the input signal to your amplifier is not sufficient you will need a preamplifier such as this one to boost the signal.

- Kit includes PCB and all electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8074	\$14.95	\$13.35
Instructions	KJ-8075	\$2.50	

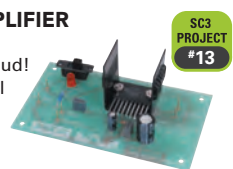


### SC3 PROJECT - HIGH POWER 12V AMPLIFIER

This amplifier-on-a-chip can deliver about 13.5-watts into a 4-ohm speaker. That's quite loud!

- Kit includes PCB, amplifier IC, heatsink and all electronic components
- Speaker and 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95

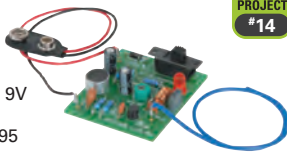
	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8076	\$26.95	\$23.95
Instructions	KJ-8077	\$2.50	



▼ **SHORT CIRCUITS 3 PROJECTS (CONTINUED)****SC3 PROJECT - SIMPLE FM MICROPHONE**

This FM transmitter has many possible uses including baby room monitor, wireless microphone or spy bug. It can be picked up on any FM radio.

- Kit includes PCB, electret microphone, 9V battery and electronic components
- Recommended Box - UB5 HB-6015 \$2.95



SC3  
PROJECT  
#14

	CAT.	Qty 1+	Qty 3+
PCB: 48 x 42mm	KJ-8078	\$12.95	\$11.35
Instructions	KJ-8079	\$2.50	

**SC3 PROJECT - MINI-MITTER FM TRANSMITTER**

Transmit stereo audio from your tap deck or CD player to any FM radio elsewhere in your house. You could even tune in on a portable walkabout radio.

- Kit supplied with PCB, 1 x AA battery and electronic components
- Recommended Box - UB3 HB-6013 \$3.95



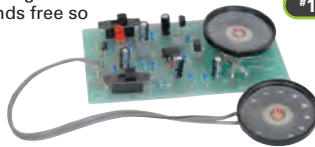
SC3  
PROJECT  
#15

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8114	\$34.95	\$31.45
Instructions	KJ-8115	\$2.50	

**SC3 PROJECT - LOW-COST INTERCOM SYSTEM**

A low-cost method of communicating between two rooms. The remote unit is hands free so it's also great as a baby monitor.

- Kit includes PCB, speakers and electronic components
- 12VDC required
- Recommended Box - UB3 HB-6013 \$3.95



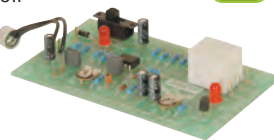
SC3  
PROJECT  
#16

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8080	\$17.95	\$15.95
Instructions	KJ-8081	\$2.50	

**SC3 PROJECT - VOX - SOUND SWITCH**

This sound-activated switch closes a relay when a loud-enough sound is heard. It switches off when the sound stops. Ideal for radio transmitters or surveillance applications.

- Kit includes PCB, relay, electret mic & electronic components
- 12VDC required
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#18

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8084	\$15.95	\$13.95
Instructions	KJ-8085	\$2.50	

**SC3 PROJECT - TRAIN SOUND FX**

Authentic sounding train whistle and horn sound effects for your model railway.

- Kit includes PCB, speaker and electronic components
- 12VDC power required
- Recommended Box - UB2 HB-6012 \$6.95



SC3  
PROJECT  
#19

	CAT.	Qty 1+	Qty 3+
PCB: 160 x 103mm	KJ-8086	\$28.95	\$25.95
Instructions	KJ-8087	\$2.50	

**SC3 PROJECT - GUITAR PRACTICE AMPLIFIER**

This low cost amplifier allows you to practice your guitar without annoying the neighbours. It has a guitar type input socket, small speaker and volume.

- Kit includes PCB, speaker socket and electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#22

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8092	\$17.95	\$15.95
Instructions	KJ-8093	\$2.50	

**SC3 PROJECT - GUITAR SUSTAIN UNIT**

Add this sustain unit to your guitar to make it sound more fulfilling. Features adjustable Decay and Attack.

- Kit includes PCB, 6.5mm sockets and electronic components.
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#26

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8100	\$26.95	\$23.95
Instructions	KJ-8101	\$2.50	

**SC3 PROJECT - GUITAR DISTORTION UNIT**

Distortion is popular to many guitarists. It can make the music sound quite different.

Project includes PCB, 6.5mm sockets and electrical components.

- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#27

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8102	\$17.95	\$15.95
Instructions	KJ-8103	\$2.50	

**SC3 PROJECT - REGULATED +12V POWER SUPPLY**

Many of the Short Circuits 3 projects require 12VDC power. Using our plugpack (MP-3055), this low cost power supply is ideal to power these projects.

- Kit supplied with PCB, 12V regulator and electronic components
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#28A

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8104	\$13.95	\$12.45
Instructions	KJ-8105	\$2.50	

**SC3 PROJECT - REGULATED +/- 12V POWER SUPPLY**

Some applications need a positive and negative supply. This circuit will supply a +12V and -12V rail.

- Kit supplied with PCB, 12V regulators and electronic components
- Requires plugpack MP-3055
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#28B

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8106	\$16.95	\$14.95
Instructions	KJ-8107	\$2.50	

**SC3 PROJECT - UNIVERSAL TIMER**

This timer is adjustable between 1-second to 3.5 minutes. An LED illuminates during the timing period and a buzzer sounds at the end.

- Kit supplied with PCB, buzzer & electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#29

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8108	\$17.95	\$15.95
Instructions	KJ-8109	\$2.50	

**SC3 PROJECT - WAVEFORM GENERATOR**

This low-cost signal generator produces adjustable square and triangular waves between 100Hz-20kHz. Ideal for testing, troubleshooting and developing circuits.

- Kit supplied with PCB and electronic components
- 12VDC power required
- Recommended Box - UB3 HB-6013 \$3.95



SC3  
PROJECT  
#30

	CAT.	Qty 1+	Qty 3+
PCB: 105 x 60mm	KJ-8110	\$19.95	\$17.95
Instructions	KJ-8111	\$2.50	





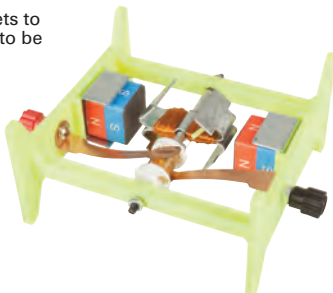
## ▼ ELECTRONIC & ELECTRICAL PROJECTS FOR KIDS

### MINI ELECTRIC MOTOR EXPERIMENT

This simple motor model demonstrates the basics of how the magnets, armature and commutator work together in an electric motor to cause rotation. The banana plugs allow simple connection of a power source.

Removeable and reversible magnets to allow the effects of magnetic field to be seen

- Open structure to see all moving parts
- Magnetic poles marked on magnet
- Removeable armature



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-9032	\$19.95	\$17.95	\$15.95

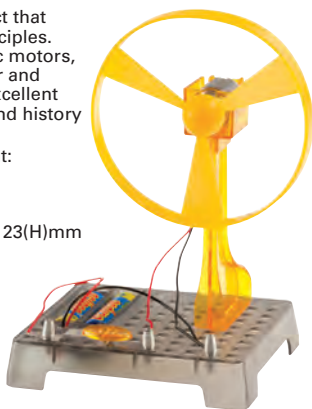
### 12 IN 1 ELECTRICAL EXPERIMENT KIT

12 different experiments to construct that demonstrate various electronic principles. Learn about static electricity, electric motors, resistors, diodes, lights, solar power and more. Kit included a manual with excellent information describing the theory and history associated with each experiment.

- Assembly time for each experiment: Approximately 10 mins
- Requires 2 x AA batteries
- Suitable for ages 8+
- Base dimensions: 120(L) x 99(W) x 23(H)mm

#### Activities:

- Static Electricity
- Conductors and insulators
- Make a fan
- Resistor
- Diode
- Make a light
- Make a Morse code machine
- Light control alarm
- Make a bell
- Make an electromagnet
- Make a motor
- Solar power cell



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8919	\$27.95	\$24.95	\$22.35

## ▼ A BIT OF FUN

### AUTOMATED ELECTRONIC BUGS

Keep your kids entertained for hours with these small robotic creatures that fit into the palm of their hands! These autonomous, high speed creatures mimic the behavior of an insect. They will run and scurry around on an even floor, table and flat surface. They have the ability to change direction if they hit an obstruction or wall and can also flip upright if they end up on their back. The vibrating motor inside this creature rotates a counterweight and propels the robotic creature forward.

A fun and safe way to entertain the kids for hours. They are the perfect collectible robot pet for your kids!

- Assorted Colours
- Batteries included
- Dimensions: 45(L) x 17(W)mm
- Suitable for ages 5+



	CAT.	Qty 1+	Qty 3+	Qty 6+
Sold Each	YG-2891	\$7.95	\$7.15	\$6.35

### Automatic Account:

For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – We'll open a 30-day account for you automatically. Just fill in the account form or apply online.

## ▼ CLOCK MAKING

### MAKE YOUR OWN CLOCK KIT

This educational clock is designed to stimulate your child's curiosity about the concept of time. The brightly coloured parts are easy to assemble and most children will require little or no parental assistance.

- Includes a wind-up pendulum based mechanism
- No batteries required!
- Suitable for ages 6+
- Dimensions: 195(Dia)mm



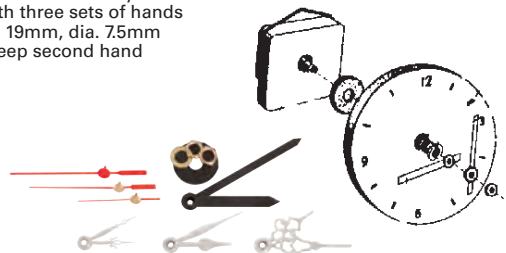
CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8996	\$14.95	\$13.45	\$11.95

### QUARTZ CLOCK MOVEMENT

#### MAKE A CUSTOM CLOCK OR REPAIR AN OLD ONE

This is a standard hour/minute/sweep second movement found in almost all electric clocks worldwide. Very reliable. Standard nut bushing mount. We have sold 10's of thousands of these and, as far as we can tell, not one has come back.

- Very compact 56 x 56 x 15mm
- Self starting one second stepping motor
- Uses 1 x AA battery that lasts 1 year
- ±15 second/month accuracy
- Supplied with three sets of hands
- Shaft length 19mm, dia. 7.5mm
- Includes sweep second hand



CAT.	Qty 1+	Qty 3+	Qty 6+
XC-0100	\$15.95	\$14.35	\$12.70

### Make Your Own: LCD Arduino® Clock

This is an easy project to assemble- just one main board and two shields, but gives a fully functional, easy to read clock display which retains the time, even when disconnected from power. You could leave it on your desk plugged into a USB port on your computer, so that it powers up whenever the computer is on.



Finished Project

See step-by-step instructions at:  
[jaycar.com.au/diy-arduino-clock-uno](http://jaycar.com.au/diy-arduino-clock-uno)

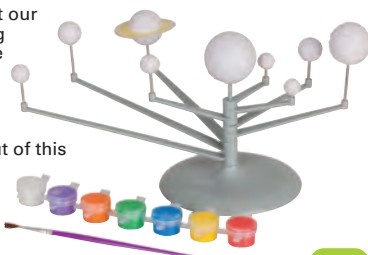


To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

## LEARN ABOUT SCIENCE

### PLANETARIUM EDUCATIONAL KIT

What better way to learn about our own Solar System than leaving your own marks on each of the planets? Assemble your own planetarium model, paint it and add highlights to create a glow effect. Watch the 30cm model glow in the dark - it's out of this world! Featuring the Sun, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune (our condolences to Pluto).



- Snap to build, no glue required at all
- Dimensions: 220(L) x 170(H) x 60(D)mm
- Suitable for ages 3+



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8994	\$9.95	\$8.75	\$7.75

### POLARIZING MAGIC PROJECT KIT

Explore the magic of polarized light, including an experiment guidebook, 2 sheets of polarizing film and more parts including a glasses frame. A fascinating scientific journey, also a great source of polarizing film for doing your own experiments.

- Five experiments
- Illusions
- 3D glasses
- 2 sheets of polarizing film
- Can also be used as source of polarizing film, eg experiments with LCD's

Recommended ages 8+

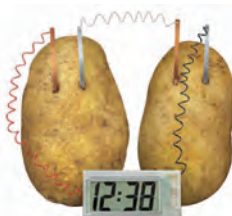


CAT.	Qty 1+
Polarizing Magic Project Kit	KJ-9024 \$9.95

### POTATO CLOCK

You can generate enough electricity to run a digital clock by plugging electrodes into common potatoes! An amazing chemical experiment which also works with tomatoes, lemons, apples - even soft drink or beer! All parts (except fruit/veg) supplied including:

- Highly accurate digital clock module
- Metal electrodes, wire
- Instructions and fluid beakers
- Perfectly safe for children and highly educational. (Do not eat fruit/veg after using as batteries)
- Clock dimensions: 65(W) x 30(H) x 12(D)mm
- Suitable for ages: 10+



CAT.	Qty 1+	Qty 3+	Qty 6+
KJ-8937	\$12.95	\$11.35	\$10.35

### CARDBOARD RADIO CONSTRUCTION KIT

Build a working cardboard radio with just a screwdriver. Easy to assemble and sounds great, no previous electronics knowledge needed. Included radio board is based around a modern digital tuning IC and is great for building into other projects.

- AM/FM Radio with AUX input
- Volume and tuning controls
- No soldering needed, all fasteners included
- Extendable antenna
- 3 x AA batteries required (not included)



	CAT.	Qty 1+	Qty 3+	Qty 6+
Cardboard Radio Construction Kit	KJ-9021	\$24.95	\$22.45	\$19.95

### CROOKES RADIOMETER

A beautiful desk gadget or serious educational toy, the Crooke's Radiometer demonstrates that light has energy, and will turn its vanes even when illuminated by a torch. Despite many people thinking that the motion is caused by the impact of photons on the vanes, the Radiometer in fact operates as a heat engine, driven by the different temperatures of the black and silver vanes.

- One piece glass body with metal vanes
- Use as simple desk ornament
- Great for physics demonstrations



CAT.	Qty 1+	Qty 3+	Qty 6+
GG-2108	\$59.95	\$53.95	\$47.95

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.



## MICROSCOPE

### 5MP USB 2.0 DIGITAL MICROSCOPE WITH PROFESSIONAL STAND

A USB microscope with a simple but incredibly useful stand that allows you to make fine adjustments to the vertical height of the microscope and swivel the scope arm around a 360 degree range. This permits a greater level of viewing accuracy and stability. The microscope can be easily removed from the stand for situations which demand it. On either side of the stand there are two metal holders to lock your object in place and a printed ruler to help you get an approximate feel for the length of objects. The optics built into this microscope are excellent. The sharpness of texture on magnified objects is incredible to look at you will spend hours searching for things to magnify (check out a full resolution 5MP capture on our website). It comes with a great piece of software for capturing 5MP (2592x1944) res JPGs, BMPs, TIFs or PNGs and 1280x960 pixel AVI files.

Excellent for educational purposes or a myriad of practical applications such as technicians, jewellers, laboratory work, and much more.



SPECIFICATIONS	QC-3199
Image Sensor	5MP
Focus Range	Manual focus from 10mm to 150mm
Snap Shot	Button or software
Shutter Speed	1 sec to 1/1000 sec
Still Image Resolution	2592x1944, 2048x1536, 1600x1200, 1280x960 pixels
Video Capture Resolution	1280x960
Flicker Control	50Hz/60Hz
Light Source	8 x LEDs with adjustable brightness
Magnification Ratio	10x, 300x (at 5MP res)
Power Source	USB
Compatibility	WinXP/Vista/7/8, Mac 10.6-10.8
Bundled Software	Microcapture Pro with measurement function
Dimensions	Microscope: 110(L) x 33(Dia)mm, Stand: 165(H) x 165(L) x 118(W)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
10x, 300x	QC-3199	\$189.00	\$169.95	\$150.95



WARRANTY





# Components



## ACTIVE COMPONENTS

Integrated Circuits	98
Light Emitting Diodes (LEDs)	104
Transducers	116
Transistors & Diodes	111
Voltage Regulators	114

## PASSIVE COMPONENTS

Capacitors	117
EMC / RFI Suppression	123
Ferrites	121
Potentiometers & Knobs	124
Resistors	126

### SPECIAL FUNCTION ICs - SMD

#### DUAL RS-232 LINE DRIVER/RECEIVER

Case SOIC16

- Dual RS-232 driver/receiver
- Sold as a pack of 10

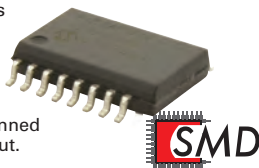


TYPE	CAT.	Qty 1+
MAX232CWE	ZK-8822	\$59.95

#### SMD 7 DARLINGTON ARRAY

High voltage, high current Darlington arrays each contain seven open collector Darlington pairs with common emitters. Each channel rated at 500mA and can withstand peak currents of 600mA. Suppression diodes are included for inductive load driving and the inputs are pinned opposite the outputs to simplify board layout.

- Sold as a pack of 10



CAT.	Qty 1+
ULN2003D	ZK-8858 \$36.95

#### SMD IC BK1198 RADIO RECEIVER

We've come a long way from cat's whiskers and triode valves to digital tuning. The ZK-8829 is a digital radio IC that can pick up AM, FM and shortwave, and can be controlled by a potentiometer or resistor string. It's the same IC as in our Cardboard Radio Kit. Comes in 16 pin SOIC package, PI6530 SMD-DIP adapter is recommended for prototyping.



##### SPECIFICATIONS ZK-8829

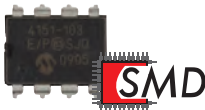
FM Band	60 - 112MHz
AM Band	504 - 1750kHz
Shortwave Band	2.2 - 22MHz
Supply Voltage	1.6V - 3.6V



CAT.	Qty 1+	Qty 10+	Qty 25+
SMD IC BK1198 Radio Receiver	ZK-8829	\$7.95	\$7.15 \$5.55

#### 8BIT 257 STEP DIGITAL POT - MCP4151-103E/P

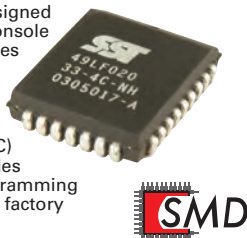
8Bit (257 step) digital pots are useful in application that require precision control. They can be used for example in the feedback network of an op amp to provide precise variable gain control, or filters to allow accurate adjustment of the filter properties.



TYPE	PINS DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
MCP4151-103E/P	8 Digital pot 257 step 10k $\Omega$	ZK-8879	\$3.95	\$3.50	\$2.75

#### SST 49LF020 LPC FLASH MEMORY

The SST 49LF020 flash memory device is designed to interface with the LPC bus for PC, game console and Internet Appliance applications. It provides protection for the storage and update of code and data in addition to adding system design flexibility through five General Purpose Inputs (GPI). The SST 49LF020 is in compliance with the Intel Low Pin Count (LPC) Interface Specification 1.0. Two interface modes are supported: LPC Mode for In-System programming and Parallel Programming (PP) Mode for fast factory programming.



CAT.	Qty 1+	Qty 10+	Qty 25+
SST 49LF020	ZZ-8900	\$14.95	\$13.35 \$10.35

### SPECIAL FUNCTION ICs - THROUGH HOLE

#### SPECIAL FUNCTION

- Major brands only

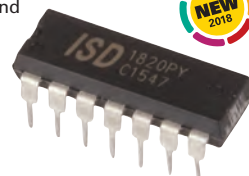


TYPE	PINS	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
1488	14	Quad line driver RS-232	ZZ-8148	\$3.75	\$3.30	\$2.60
1489	14	Quad line receiver RS-232	ZZ-8149	\$3.75	\$3.30	\$2.60
27C256	28	256k (32k x 8) EPROM	ZZ-8471	\$14.95	\$13.35	\$10.35
24LC16B	8	16k I2C serial EEPROM	ZZ-8480	\$3.75	\$3.30	\$2.60
24LC256	8	256k I2C serial EEPROM	ZZ-8485	\$5.95	\$5.25	\$4.15
ADC0804	20	8 bit A to D converter	ZK-8862	\$14.95	\$13.35	\$10.35
DAC0800LCN	16	8 bit D to A converter	ZK-8864	\$7.95	\$7.10	\$5.50
L6202	18	Full bridge driver 1.5A 48V	ZK-8874	\$14.95	\$13.35	\$10.35
MAX 232	16	Dual RS232 driver receiver	ZK-8824	\$6.95	\$6.25	\$4.75
MC34063	8	DC to DC converter	ZK-8837	\$7.95	\$7.10	\$5.50
UA494/TL494	16	Switchmode power controller	ZK-8850	\$6.95	\$6.25	\$4.75
ULN2003N	16	7 Darlington array (5V TTL, CMOS)	ZK-8855	\$4.95	\$4.45	\$3.45
XR2206	16	Monolithic function generator	ZK-8830	\$19.95	\$17.70	\$13.70
XR2211	14	FSK demodulator/tone detector	ZK-8831	\$9.95	\$8.75	\$6.75

#### ISD1820 RECORD AND PLAYBACK IC (DIP 14)

This is the same IC as the XC-4605 Record and Playback module. Simple digital control of recording and playback of audio samples, including the ability to drive an 8 $\Omega$  speaker directly.

- Compact 14 pin DIP package
- Drive 8 $\Omega$  speaker directly
- Loop select option
- Sample rate adjustable

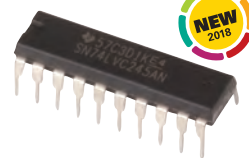


CAT.	Qty 1+	Qty 10+	Qty 25+
ISD1820 Record and Playback IC	ZZ-8202	\$5.95	\$5.35 \$4.15

#### 74LVC245 DIP 8 CHANNEL BUS TRANSCEIVER DIP 20

Although the full name of the ZK-8884 is a 74LVC245 Octal Bus Transceiver, it also makes a great eight channel 3.3V-5V level converter. The inputs are 5V tolerant and the outputs are all 3.3V compatible.

- Eight Channels
- Direction control pin
- Output enable pin
- 20 pin DIP package suits breadboarding



CAT.	Qty 1+	Qty 10+	Qty 25+
74LVC245	ZK-8884	\$4.95	\$4.35 \$2.95

#### L293D DUAL FULL BRIDGE MOTOR DRIVER IC

The L293D quad half H-bridge motor driver is capable of providing four high power outputs, ideal for driving a stepper motor, or two DC motors. Suitable for 3.3V or 5V logic.

- 16pin DIP IC
- 600mA current drive per channel
- 36V maximum supply voltage
- 5kHz maximum PWM frequency



CAT.	Qty 1+	Qty 10+	Qty 25+
L293D	ZK-8880	\$4.95	\$4.45 \$3.45

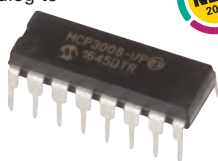


## SPECIALTY ICs

### MCP3008 8 CHANNEL 10 BIT ADC DIP 16

The MCP3008 is an 8 channel 10 bit ADC (analog-to-digital converter) suitable for use with a microcontroller or single board computer. Great for adding analog inputs to chips that lack it.

- SPI interface
- Up to 200 ksp/s at 5V supply
- Suits Raspberry Pi



	CAT.	Qty 1+	Qty 10+	Qty 25+
MCP3008 8 Channel 10 Bit ADC	ZK-8868	\$12.95	\$11.45	\$8.95

### L9110 BRIDGE DRIVER IC DIP 8

A compact 8 pin DIP package which can control a small motor from a microcontroller.

- Handles up to 2.5V- 12V, 800mA continuous
- Interface to TTL level inputs down to 2.7V
- Suitable for reversible control on one DC motor
- Easy for prototyping on breadboards

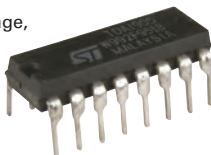


	CAT.	Qty 1+	Qty 10+	Qty 25+
L9110 Bridge Driver IC DIP 8	ZK-8882	\$3.95	\$3.55	\$2.75

### TDA1905 5W AMPLIFIER IC WITH MUTE

Monolithic integrated circuit in POWERDIP package, intended for use as low frequency power amplifier in a wide range of applications in radio and TV sets:

- Muting facility
- High supply voltage rejection
- Voltage range 4V to 30V
- Protection against chip over temperature
- Power dissipation of up to 6W and a thermal resistance of 15°C/W (junction to pins)
- Very low noise
- Low switch-on noise
- Full data on website



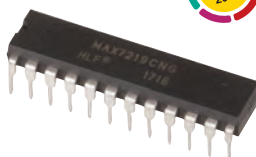
	CAT.	Qty 1+	Qty 10+	Qty 25+
TDA1905	ZL-3600	\$6.95	\$6.25	\$4.75

### MAX7219 LED MATRIX DRIVER IC

The MAX7219 is an all-in-one LED Matrix driver suitable for controlling an 8x8 LED Matrix or even eight 7 segment displays (BCD decoding can be done on the chip too). This is the same IC that is on XC-4499 and XC-3714.

- SPI interface (3 IO pins)
- Can be daisy chained for larger displays
- Adjustable brightness
- 24 Pin DIP package

Requires only one external component (resistor for LED current setting)

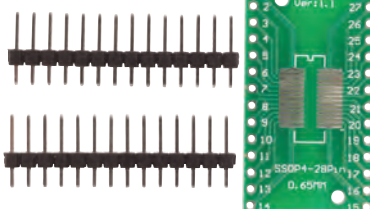


	CAT.	Qty 1+	Qty 10+	Qty 25+
MAX7219 LED Matrix Driver IC	ZK-8825	\$4.95	\$4.45	\$3.45

### 28 PIN SOIC/SOP TO DIP BREADBOARD ADAPTOR

More and more IC's are now only available as surface mount variants, making prototyping harder. The SMD breadboard adaptor allows SMD IC's and other smaller pitch components to be used with standard 0.1" prototyping equipment such as breadboard and protoboards.

- Suits 4-28 pin SOP/SOIC IC's (SOIC on one side, SOP on the other)
- 1.27mm pitch and 0.65mm pitch
- Header strip included

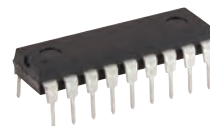


	CAT.	Qty 1+	Qty 10+	Qty 25+
28 pin SOIC/SOP to DIP Adaptor	PI-6530	\$2.95	\$2.62	\$2.35

## MICROCONTROLLER - ATMEL

### ATMEL MICROCONTROLLERS

- 8 bit micro + flash memory



TYPE	PINS	MEMORY	CAT.	Qty 1+	Qty 10+	Qty 25+
AT89C2051-24PC	20	2kB	ZZ-8700	\$4.75	\$4.25	\$3.30
AT90S2313-10PC	20	2kB	ZZ-8710	\$9.95	\$8.95	\$6.95
AT90S1200-12PC	20	1kB	ZZ-8750	\$10.95	\$9.85	\$7.65
ATmega8535-16PU	40	8kB	ZZ-8742	\$9.95	\$8.75	\$6.75
ATmega16-8PC	40	16kB	ZZ-8755	\$12.95	\$11.35	\$8.95
ATmega32-8PC/-16PU	40	32kB	ZZ-8760	\$19.95	\$17.95	\$13.95
ATmega8515-8PC	40	8kB	ZZ-8765	\$9.95	\$8.75	\$6.75

Our full range of Arduino Boards, Modules & Shields starts on page 18

### ATMEGA AVR RISC MICROCONTROLLERS - 16MHZ

Atmel's AVR microcontrollers utilise their famous RISC core operating at market leading speeds to make some of the best microcontroller products available. Architecture engineered for working with compiled C language programs, there is no longer a need for assembly language or a need for inefficient and unwieldy BASIC, so you can develop your project quicker without having to learn a new language.

- 8 bit micro + flash memory



TYPE	PINS	MEMORY	CAT.	Qty 1+	Qty 10+	Qty 25+
ATmega8-16PI	28	8kB	ZZ-8753	\$8.95	\$7.95	\$6.25
ATmega128-16AI	40	12kB	ZZ-8770	\$21.95	\$19.75	\$15.35
ATmega162-16PI	40	6kB	ZZ-8772	\$19.95	\$17.95	\$13.95

### ATMEGA328P MCU IC WITH ARDUINO UNO BOOTLOADER & 16MHZ CRYSTAL

An Atmel AVR ATmega328P microcontroller for you to build your very own customised Arduino compatible projects. For your convenience it comes with the Arduino Uno bootloader pre-installed and features a label on top which details the pinouts. Includes 16MHz crystal oscillator.

- Same IO pins as Duinotech Uno Board
- 0 - 4MHz @ 1.8 - 5.5V, 0 - 10MHz @ 2.7 - 5.5V, 0 - 20MHz @ 4.5 - 5.5V
- 28-pin DIP format for easy use in breadboards or Arduino compatible boards



### duinotech

	CAT.	Qty 1+	Qty 10+	Qty 25+
	ZZ-8727	\$12.95	\$11.65	\$9.05

### ATTINY85 IC 8 PIN DIP8

The ATtiny85 AVR is a RISC-based microcontroller in an 8 pin DIP microcontroller. The device achieves a throughput of 20 MIPS at 20MHz and operates between 2.7-5.5 volts. The ATtiny85 is also capable of being programmed as an Arduino board using the ATtiny85 board profile and an ISP programmer.

- 8kB Flash Program Memory
- 512B EEPROM
- 512B RAM
- 6 GPIO pins (with reset disabled)
- 4 10bit ADC



	CAT.	Qty 1+	Qty 10+	Qty 25+
ATTiny85 IC 8 pin DIP8	ZZ-8721	\$4.95	\$4.45	\$3.95

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store. \* Conditions apply.

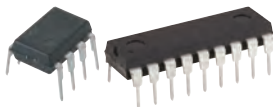






## MICROCONTROLLER - PIC

### THROUGH HOLE



TYPE	PINS	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
PIC12C509A-04P	8	8 Bit micro	ZZ-8600	\$2.95	\$2.60	\$2.00
PIC16C711-20/P	18	8 Bit micro + A to D converter	ZZ-8550	\$12.95	\$11.35	\$8.95
PIC16C63A-20/SP	28	8 Bit micro + A to D converter	ZZ-8560	\$14.50	\$12.35	\$9.75
PIC16F877A-I/P	40	8 Bit enhanced flash micro	ZZ-8540	\$12.95	\$11.35	\$8.95

### SMD

- Sold as a pack of 5

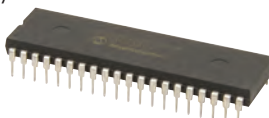


TYPE	CASE	DESCRIPTION	CAT.	Qty 1+
PIC16C711-20/SO	SOIC18	8 Bit micro + A to D converter	ZZ-8552	\$14.95
PIC16F628A-20/SO	SOIC18	8 bit flash micro	ZZ-8510	\$19.95

### PIC18F4550 MICROCONTROLLER WITH USB INTERFACE

Adding a USB interface to a project can often be a complex and difficult task, often involving a dedicated IC just to perform the USB control. With this PIC, you can do both I/O logic with your project and perform the USB communications with just one IC. USB will still require a bit of work but it won't be as complex anymore as having to source a dedicated IC and learn how to use it. This PIC is ideal for embedded control and monitoring applications which require connection to a computer for data up/download, or firmware updates. This PIC is feature packed:

- Enhanced Flash and nanoWatt technology
- 2Kb memory for data
- Full Speed USB 2.0 interface (12Mbps)
- I2Ctm and SPItm interface (10Mbps)
- Asynchronous serial port
- 48MHz performance (12MIPS)



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
PIC18F4550	ZZ-8570	\$21.95	\$19.70	\$15.25

### PROGRAMMING & CUSTOMISING THE PIC MICROCONTROLLER BOOK

Tap into the latest advances in PIC technology with the fully revamped third edition of this brilliant book. More than 600 illustrations and comprehensive, easy-to-understand coverage of the PIC microcontroller's hardware and software schemes. With 100 experiments, projects and libraries, you get a firm grasp of PICs, how they work and the ins-and-outs of their most dynamic applications. Covers Assembly, BASIC, and C programming languages. It also covers the latest program development tools and includes a refresher in electronics and programming as well as reference material.

#### Topics covered:

- Setting up your own PIC microcontroller development lab
- PIC MCU basics
- Useful tables and data
- PIC microcontroller interfacing capabilities, software development, and applications
- Basic & digital electronics
- BASIC & C references
- 16-bit numbers
- Useful circuits and routines



	CAT.	Qty 1+
Soft cover, 1263 pages	BT-1347	\$99.00

### ELECTRONICS DEMYSTIFIED

Part of the popular Demystified series, this book teaches you electronics theory, it does not include projects. It avoids heavy mathematical formulae, but, be warned there are equations in this book. They are not seriously hard though! The book starts at simple DC circuits, goes through AC circuits, impedance, reactance, power supply concepts, semiconductor basics, amplifiers, oscillators, RF, telecommunications and finishes on antennas. At the end of each chapter is a straightforward quiz (multiple choice) to make sure you are on top of concepts. This is the best-written technical book on novice to moderately advanced electronics we have seen. Read this book and understand it - you are a serious techo.

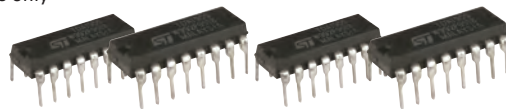
- Dimensions: 230 x 185mm



	CAT.	Qty 1+
Soft cover, 468 pages	BM-7106	\$39.95

## CMOS SERIES

- Standard CMOS logic
- Major brands only



TYPE	PINS	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
4001	14	Quad 2 input NOR gate	ZC-4001	\$1.15	\$0.95	\$0.65
4007	14	Dual comp pair plus inverter	ZC-4007	\$1.35	\$1.15	\$0.80
4009	16	Hex buffer (inverting)	ZC-4009	\$1.75	\$1.50	\$1.05
4011	14	Quad 2 input NAND gate	ZC-4011	\$1.15	\$0.95	\$0.65
4012	14	Dual 4 input NAND gate	ZC-4012	\$1.95	\$1.70	\$1.15
4013	14	Dual D flip-flop	ZC-4013	\$1.15	\$0.95	\$0.65
4015	16	Dual 4 bit static shift register	ZC-4015	\$1.75	\$1.50	\$1.05
4016	14	Quad bi-lateral switch	ZC-4016	\$1.15	\$0.95	\$0.65
4017	16	Decade counter/divider	ZC-4017	\$1.15	\$0.95	\$0.65
4018	16	Presetable divide by N counter	ZC-4018	\$2.75	\$2.35	\$1.65
4020	16	14-stage ripple carry binary counter	ZC-4020	\$1.95	\$1.65	\$1.15
4021	16	8-stage static shift register	ZC-4021	\$1.95	\$1.65	\$1.15
4022	16	Divide-by-8 counter/divider	ZC-4022	\$1.95	\$1.65	\$1.15
4023	14	Triple 3 input NAND gate	ZC-4023	\$1.25	\$1.05	\$0.75
4024	14	7-stage ripple carry binary counter	ZC-4024	\$1.25	\$1.05	\$0.75
4025	14	Triple 3-input NOR gate	ZC-4025	\$1.25	\$1.05	\$0.75
4026	16	Decade counter with 7 segment output	ZC-4026	\$2.45	\$2.10	\$1.45
4027	16	Dual JK flip-flop	ZC-4027	\$1.15	\$0.95	\$0.65
4028	16	BCD-to-Decimal Decoder	ZC-4028	\$1.15	\$0.95	\$0.65
4029	16	Presetable bin/decade up/down cnt	ZC-4029	\$1.75	\$1.50	\$1.05
4030	14	Quad 2 input exclusive OR gate	ZC-4030	\$1.75	\$1.50	\$1.05
4040	16	12-stage ripple carry binary counter	ZC-4040	\$1.75	\$1.50	\$1.05
4046	16	Micropower phase locked loop (PLL)	ZC-4046	\$1.95	\$1.65	\$1.15
4047	14	Monostable/Astable multivibrator	ZC-4047	\$2.15	\$1.85	\$1.25
4049	16	Hex buffer (inverting)	ZC-4049	\$1.15	\$0.95	\$0.65
4050	16	Hex buffer (non-inverting)	ZC-4050	\$1.25	\$1.10	\$0.75
4051	16	Single 8 channel analog mux/demux	ZC-4051	\$1.75	\$1.50	\$1.05
4052	16	Dual 4 channel analog mux/demux	ZC-4052	\$1.15	\$0.95	\$0.65
4053	16	Triple 2 channel analog mux/demux	ZC-4053	\$1.75	\$1.50	\$1.05
4056	16	BCD to 7seg LCD decoder/driver	ZC-4056	\$2.75	\$2.35	\$1.65
4060	16	14-stage ripple carry binary counter	ZC-4060	\$1.75	\$1.50	\$1.05
4066	14	Quad bi-lateral switch	ZC-4066	\$1.15	\$0.95	\$0.65
4069	14	Hex inverter	ZC-4069	\$1.15	\$0.95	\$0.65
4070	14	Quad 2 input exclusive OR gate	ZC-4070	\$1.15	\$0.95	\$0.65
4071	14	Quad 2 input OR gate	ZC-4071	\$1.15	\$0.95	\$0.65
4073	14	Triple 3 input AND gate	ZC-4073	\$1.15	\$0.95	\$0.65
4075	14	Triple 3 input OR gate	ZC-4075	\$1.75	\$1.50	\$1.05
4076	16	4 bit tri-state D-type register	ZC-4076	\$1.75	\$1.50	\$1.05
4077	14	Quad 2 input exclusive NOR gate	ZC-4077	\$1.75	\$1.50	\$1.05
4081	14	Quad 2 input AND gate	ZC-4081	\$1.25	\$1.05	\$0.75
4093	14	Quad 2 input NAND schmitt trigger	ZC-4093	\$1.65	\$1.40	\$0.95
4094	16	8-bit tri-state shift register/latch	ZC-4094	\$1.65	\$1.40	\$0.95
40106	14	Hex schmitt trigger (inverting)	ZC-4914	\$1.75	\$1.50	\$1.05
4502	16	Strobed hex tri-state inverter	ZC-4502	\$2.15	\$1.85	\$1.25
4510	16	BCD up/down counter + preset	ZC-4510	\$1.95	\$1.65	\$1.15
4511	16	BCD to 7seg decoder/driver	ZC-4511	\$1.95	\$1.65	\$1.15
4516	16	Binary up/down counter + preset	ZC-4516	\$2.65	\$2.30	\$1.55
4518	16	Dual BCD up counter	ZC-4518	\$2.15	\$1.85	\$1.25
4520	16	Dual binary up counter	ZC-4520	\$1.95	\$1.65	\$1.15
4543	16	BCD to 7seg LCD latch/decoder/driver	ZC-4543	\$1.75	\$1.50	\$1.05



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!

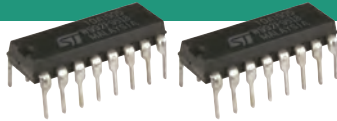


**CLICK & COLLECT**

To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

## 74LS SERIES

- Low power Schottky logic
- Major brands only



TYPE	PINS	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
74LS00	14	Quad 2 input NAND gate	ZS-5000	\$1.95	\$1.75	\$1.35
74LS01	14	Quad 2 input NAND gate (OC)	ZS-5001	\$1.65	\$1.45	\$1.15
74LS02	14	Quad 2 input NOR gate	ZS-5002	\$1.65	\$1.45	\$1.15
74LS04	14	Hex Inverter	ZS-5004	\$1.65	\$1.45	\$1.15
74LS05	14	Hex inverter (OC)	ZS-5005	\$1.65	\$1.45	\$1.15
74LS08	14	Quad 2 input AND gate	ZS-5008	\$1.65	\$1.45	\$1.15
74LS10	14	Triple 3 input NAND gate	ZS-5010	\$1.75	\$1.55	\$1.20
74LS11	14	Triple 3 input AND gate	ZS-5011	\$1.75	\$1.55	\$1.20
74LS14	14	Hex schmitt trigger inverter	ZS-5014	\$1.55	\$1.35	\$1.05
74LS20	14	Dual 4 input NAND gate	ZS-5020	\$1.65	\$1.45	\$1.15
74LS27	14	Triple 3 input NOR gate	ZS-5027	\$2.45	\$2.20	\$1.70
74LS30	14	Single 8 input NAND gate	ZS-5030	\$1.25	\$1.10	\$0.85
74LS32	14	Quad 2 input OR gate	ZS-5032	\$1.65	\$1.45	\$1.15
74LS42	16	BCD to decimal decoder	ZS-5042	\$4.95	\$4.45	\$3.45
74LS47	16	BCD to 7 seg decoder/driver OC	ZS-5047	\$2.25	\$2.00	\$1.55
74LS74	14	Dual D flip-flop, preset, clear	ZS-5074	\$1.65	\$1.45	\$1.15
74LS85	16	4 bit magnitude comparator	ZS-5085	\$3.45	\$3.10	\$2.40
74LS86	14	Quad 2 input exclusive OR gate	ZS-5086	\$1.65	\$1.45	\$1.15
74LS90	14	Decade counter	ZS-5090	\$2.25	\$2.00	\$1.55
74LS93	14	4 bit binary counter	ZS-5093	\$4.95	\$4.45	\$3.75
74LS109	16	Dual JK flip-flop + preset + clear	ZS-5109	\$4.95	\$4.45	\$3.45
74LS123	16	Dual retrigger monostable with clear	ZS-5123	\$1.95	\$1.75	\$1.35
74LS125	14	Quad tri-state buffer	ZS-5125	\$1.75	\$1.55	\$1.40
74LS138	16	3 to 8 line decoder/demux	ZS-5138	\$1.95	\$1.75	\$1.35
74LS139	16	Dual 2 to 4 line decoder/demux	ZS-5139	\$1.55	\$1.35	\$1.05
74LS151	16	Single 8 input multiplexer	ZS-5151	\$1.95	\$1.75	\$1.35
74LS153	16	Dual 4 input multiplexer	ZS-5153	\$2.25	\$2.00	\$1.55
74LS155	16	Dual 2 to 4 line decoder/demux	ZS-5155	\$2.50	\$2.20	\$1.75
74LS157	16	Quad 2 to 1 line multiplexer	ZS-5157	\$1.65	\$1.45	\$1.15
74LS161	16	4 bit binary counter (async. reset)	ZS-5161	\$2.25	\$2.00	\$1.55
74LS164	14	8 bit shift register (ser. in/par. out)	ZS-5164	\$1.65	\$1.45	\$1.15
74LS174	16	Hex D flip-flop + clear	ZS-5174	\$2.65	\$2.35	\$1.85
74LS175	16	Quad D flip-flop with clear	ZS-5175	\$1.65	\$1.45	\$1.15
74LS192	16	Up/down dec counter/dual clock	ZS-5192	\$2.75	\$2.45	\$1.90
74LS193	16	Up/down bin counter/dual clock	ZS-5193	\$2.25	\$2.00	\$1.55
74LS221	16	Dual monostable multivibrator	ZS-5221	\$1.80	\$1.55	\$1.25
74LS240	20	Octal tri-state buffer (inverting)	ZS-5240	\$2.25	\$2.00	\$1.55
74LS241	20	Octal tri-state buffer (non-inverting)	ZS-5241	\$2.50	\$2.25	\$1.75
74LS244	20	Octal tri-state line driver/receiver	ZS-5244	\$2.25	\$2.00	\$1.55
74LS245	20	Octal tri-state bus transceiver	ZS-5245	\$2.25	\$2.00	\$1.55
74LS273	20	Octal D flip-flop + clear	ZS-5273	\$2.50	\$2.20	\$1.75
74LS283	16	4 bit binary full adder + carry	ZS-5283	\$4.75	\$4.25	\$3.30
74LS373	20	Octal tri-state transparent latch	ZS-5273	\$1.95	\$1.75	\$1.35
74LS374	20	Octal tri state D flip-flop	ZS-5274	\$1.95	\$1.75	\$1.35

## TTL SERIES

- Standard TTL logic
- Major brands only



TYPE	PIN	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
7404	14	Hex inverter	ZS-5804	\$3.95	\$3.45	\$2.35
7405	14	Hex inverter with OC outputs	ZL-3405	\$3.95	\$3.45	\$2.35
7406	14	Hex inverter with 30V OC outputs	ZS-5806	\$2.95	\$2.55	\$1.75
7407	14	Hex buffer with 30V OC outputs	ZS-5807	\$1.65	\$1.40	\$0.95

## NON-STATIC SHEETING

### CONDUCTIVE FOAM

Non-static sheeting for storing CMOS, ICs, LSIs, etc.

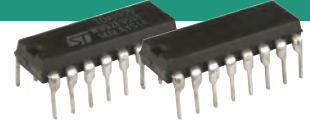
- Will store up to 150 ICs on one sheet
- Reusable, Can be cut with scissors or hobby knife for smaller pieces
- Size 225x150mm



CAT.	Qty 1+	Qty 3+	Qty 6+
ZV-9998	\$9.95	\$8.75	\$6.75

## 74HC SERIES

- High speed CMOS logic
- Major brands only



TYPE	PINS	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
74HC00	14	Quad 2 input NAND gate	ZC-4800	\$1.25	\$1.10	\$0.75
74HC02	14	Quad 2 input NOR gate	ZC-4802	\$1.45	\$1.25	\$0.85
74HC04	14	Hex inverter	ZC-4804	\$1.45	\$1.25	\$0.85
74HC08	14	Quad 2 input AND gate	ZC-4808	\$1.45	\$1.25	\$0.85
74HC10	14	Triple 3 input NAND gate	ZC-4810	\$1.45	\$1.25	\$0.85
74HC14	14	Hex schmitt trig inverter	ZC-4821	\$1.45	\$1.25	\$0.85
74HC27	14	Triple 3 input NOR gate	ZC-4827	\$1.45	\$1.25	\$0.85
74HC30	14	8 input NAND gate	ZC-4811	\$2.25	\$1.95	\$1.35
74HC32	14	Quad 2 input OR gate	ZC-4823	\$1.45	\$1.25	\$0.85
74HC42	16	BCD to decimal decoder	ZC-4826	\$2.75	\$2.35	\$1.65
74HC51	14	Dual 2 wide/2 input, 2 wide/3 input AND-OR-INVERT gate	ZC-4828	\$2.15	\$1.85	\$1.25
74HC73	14	Dual JK flip-flop + clear	ZC-4829	\$2.15	\$1.85	\$1.25
74HC74	14	Dual D flip-flop + preset + clear	ZC-4830	\$1.45	\$1.25	\$0.85
74HC76	16	Dual JK flip-flop + preset + clear	ZC-4832	\$3.95	\$3.45	\$2.35
74HC85	16	4 bit magnitude comparator	ZC-4834	\$2.15	\$1.85	\$1.25
74HC86	14	Quad 2 input exclusive OR gate	ZC-4835	\$1.50	\$1.30	\$0.90
74HC107	14	Dual JK flip-flop + clear	ZC-4837	\$2.95	\$2.55	\$1.75
74HC123	16	Dual retrigger monostable multivibrator + clear	ZC-4840	\$2.15	\$1.85	\$1.25
74HC125	14	Quad tri-state buffer (non-inverting)	ZC-4842	\$1.95	\$1.65	\$1.15
74HC132	14	Quad 2 input NAND gate + schmitt trig	ZC-4844	\$1.95	\$1.65	\$1.15
74HC138	16	3 to 8 line decoder/demux	ZC-4846	\$2.15	\$1.85	\$1.25
74HC139	16	Dual 2 to 4 line decoder/demux	ZC-4848	\$2.15	\$1.85	\$1.25
74HC151	16	8 to 1 line multiplexer	ZC-4849	\$2.15	\$1.85	\$1.25
74HC154	24	4 to 16 line decoder/demux	ZC-4850	\$3.95	\$3.45	\$2.35
74HC157	16	Quad 2 line to 1 line multiplexer	ZC-4853	\$1.75	\$1.50	\$1.05
74HC160	16	Synch 4 bit BCD counter + preset	ZC-4855	\$3.95	\$3.45	\$2.35
74HC161	16	Synch 4 bit binary counter + preset	ZC-4856	\$2.65	\$2.30	\$1.55
74HC164	14	8 bit ser-in/par-out shift reg	ZC-4857	\$1.75	\$1.50	\$1.05
74HC165	16	8 bit par-in/ser-out shift reg	ZC-4858	\$1.75	\$1.50	\$1.05
74HC174	16	Hex D flip-flop + clear	ZC-4862	\$1.75	\$1.50	\$1.05
74HC193	16	Synch 4 bit binary up/down counter	ZC-4864	\$1.95	\$1.65	\$1.15
74HC221	16	Dual monostable multivibrator	ZC-4865	\$3.25	\$2.80	\$1.90
74HC240	20	Octal tri-state buffer (inverting)	ZC-4867	\$2.85	\$2.45	\$1.70
74HC244	20	Octal tri-state buffer (non-inverting)	ZC-4869	\$1.95	\$1.65	\$1.15
74HC245	20	Octal tri-state transceiver	ZC-4870	\$1.95	\$1.65	\$1.15
74HC367	16	Hex tri-state buffer	ZC-4872	\$2.15	\$1.85	\$1.25
74HC373	20	Octal tri-state transparent latch	ZC-4874	\$1.95	\$1.65	\$1.15
74HC374	20	Octal tri-state D flip-flop	ZC-4875	\$2.15	\$1.85	\$1.25
74HC393	14	Dual 4 bit binary counter	ZC-4880	\$2.50	\$2.20	\$1.75
74HC573	20	Octal tri-state transparent D latch	ZC-4890	\$2.85	\$2.45	\$1.70
74HC595	16	8 bit tri-state ser-in/ser+ par-out shift reg	ZC-4895	\$3.35	\$2.90	\$1.95
74HC4066	14	Quad bilateral analog switch	ZC-4892	\$1.15	\$0.95	\$0.65

### 41 PROJECTS USING 741 IC

By M C Sharma. The 741 OP amp IC is very inexpensive yet is comparable to the best in respect of versatility and performance. We can't list every one of the 41 kits but here are a few examples: inverting and non-inverting AC and DC amps, crystal, magnetic, guitar, telephone and mic preamps, 3W and 12W amps, intercom, AC and DC motor control, schmitt trigger, square wave generator, flasher, timer light op relay, DC voltmeter, AC millivoltmeter, RPM counter, A to D converter, etc.



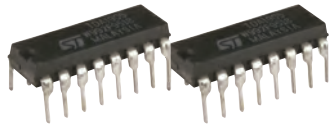
CAT.	Qty 1+
Soft cover, 37 pages 140 x 210mm	BM-2430 \$7.50



## ✓ LINEAR ICs

### THROUGH HOLE

- Major brands only



TYPE	PINS	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
AN7511	8	Balanced transformerless audio amp 1W	ZL-3388	\$4.95	\$4.45	\$3.45
BA1404	18	FM stereo transmitter	ZL-3995	\$6.95	\$6.25	\$4.85
CA3140	8	4.5MHz BioMOS op-amp	ZL-3835	\$3.75	\$3.30	\$2.60
CA3130	8	15MHz BioMOS op-amp	ZL-3860	\$4.95	\$4.45	\$3.45
INA126PA	8	Mircopower Instrument Amp	ZL-3976	\$6.95	\$6.25	\$4.85
LM301	8	High performance op-amp	ZL-3301	\$2.25	\$2.00	\$1.55
LM308	8	Precision op-amp	ZL-3308	\$12.95	\$11.35	\$8.95
LM311	8	Voltage comparator	ZL-3311	\$1.95	\$1.75	\$1.35
LM319	14	High speed dual comparator	ZL-3319	\$3.75	\$3.30	\$2.60
LM324	14	Quad low power op-amp	ZL-3324	\$2.35	\$2.09	\$1.60
LM334Z	3	Adjustable current source	ZL-3334	\$2.75	\$2.45	\$1.90
LM335Z	3	Temperature sensor T092	ZL-3336	\$4.50	\$3.95	\$3.15
LM339	14	Quad low power comparator	ZL-3339	\$1.95	\$1.75	\$1.35
LM348	14	Quad 741 op-amp	ZL-3348	\$2.75	\$2.45	\$1.90
LM358	8	Dual low power op-amp	ZL-3358	\$2.25	\$2.00	\$1.55
LM380	14	Audio power amp 2.5W	ZL-3380	\$3.45	\$3.05	\$2.35
LM386N-1	8	Low voltage audio amp 325mW	ZL-3386	\$2.75	\$2.45	\$1.90
LM393	8	Low power dual comparator	ZL-3393	\$2.25	\$2.00	\$1.55
LM567	8	Low power tone decoder	ZL-3567	\$3.75	\$3.30	\$2.60
LM741	8	General purpose op-amp	ZL-3741	\$1.95	\$1.75	\$1.35
LM747	14	Dual op-amp	ZL-3747	\$5.50	\$4.90	\$3.75
LM833N	8	Dual low noise op-amp	ZL-3833	\$3.20	\$2.83	\$2.20
LM1458	8	Dual op-amp	ZL-3753	\$1.75	\$1.55	\$1.20
LM1875	5	25W audio power amplifier	ZL-3755	\$7.95	\$7.15	\$5.55
LM2917	14	Frequency to voltage converter	ZL-3930	\$6.50	\$5.75	\$4.45
LM3875T	11	56W audio power amplifier	ZL-3752	\$18.95	\$16.95	\$12.95
LM3900	14	Quad op-amp	ZL-3900	\$2.75	\$2.45	\$1.90
LM3914	18	LED bar/dot driver (linear)	ZL-3914	\$8.25	\$7.25	\$5.75
LM3915	18	LED bar/dot driver (logarithmic)	ZL-3915	\$8.25	\$7.25	\$5.75
LM4558	8	Dual high performance op-amp	ZL-3958	\$1.75	\$1.55	\$1.20
LM7555	8	CMOS timer	ZL-3455	\$2.15	\$1.85	\$1.25
LMC6482AIN	8	Dual CMOS op-amp	ZL-3482	\$5.95	\$5.35	\$4.15
LMC6484AIN	14	Quad CMOS op-amp	ZL-3484	\$9.95	\$8.95	\$6.95
NE555	8	555 timer	ZL-3555	\$2.25	\$2.00	\$1.55
NE556	14	Dual 555 timer	ZL-3556	\$1.95	\$1.75	\$1.35
NE5534N	8	Low noise op-amp	ZL-3970	\$3.95	\$3.55	\$2.75
NE5534AN	8	Ultra low noise op-amp	ZL-3971	\$4.85	\$4.30	\$3.30
OP07C/D	8	Precision op-amp	ZL-3974	\$4.75	\$4.25	\$3.30
OPA2314PA	8	Dual high perf audio op-amp	ZL-3972	\$8.95	\$7.95	\$6.25
TL071/LF351	8	Single low noise JFET op-amp	ZL-3071	\$2.15	\$1.90	\$1.50
TL072/LF353	8	Dual low noise JFET op-amp	ZL-3072	\$2.15	\$1.90	\$1.50
TL074/LF347	14	Quad low noise JFET op-amp	ZL-3074	\$2.75	\$2.45	\$1.90
TL084	14	Quad JFET op-amp	ZL-3084	\$2.50	\$2.20	\$1.75

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.

## SMD LINEAR ICs

SMD op-amp ICs for audio applications.

- Packs of 10



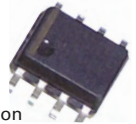
TYPE	CASE	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
LM324M	SOIC14	Quad low power op-amp	ZL-3342	\$29.95	\$26.90	\$20.70
μA741CD	SOIC8	General Purpose op-amp	ZL-3070	\$9.95		

## SMD 555 TIMER ICs

- Timing from microseconds through hours
- Operates in both astable and monostable modes
- Adjustable duty cycle
- Output can source or sink 200mA
- Output and supply TTL compatible
- Normally on and normally off output
- Sold as a pack of 10

### Applications:

- Timing
- Pulse generation
- Time delay generation
- Pulse width modulation
- Pulse position modulation
- Linear ramp generator

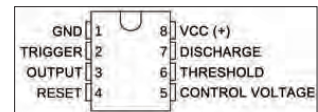


TYPE	CASE	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
NE555D	SOIC8	555 Timer	ZL-3550	\$13.95	\$12.35	\$9.75

## Tech Talk: The 555 Timer

It would be a mean-spirited person who did not concede that the 555 Timer IC was - and still is - the most popular chip ever made. Invented in 1971 by a U.S.

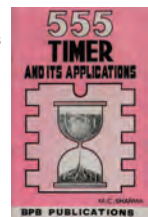
company called Signetics it has a number of really useful features. Firstly it's a timer. It's a pulse generator and finally an oscillator, all in an 8 pin package. The original version was fabricated with bipolar transistors, and although still popular a CMOS version is now dominant. The bipolar version, like 74 series TTL drew a lot of current and also created an annoying amount of switching noise on power supply rails. Such is the popularity of this circuit, it is available in standard bipolar, CMOS in single, double and quad timer packages. Jaycar still carry the product in original form, (555) dual 556, CMOS 7555 and in a single surface mount version! It was said that the name 555 came from the fact that the circuit contained 3 x 5k resistors used within. The inventor of the original device, Hans Camenzind disputes this, saying that the number of the part was arbitrary. Whatever, the fact is that around a billion of them are made every year in one form or another.



## Related Product: 555 TIMER & ITS APPLICATIONS

The 555 Timer IC is probably the most used IC in the world. It gives accurate timing range of micro seconds to hours. This book describes the functions and operation of the 555, then explains 21 projects to build using the IC. Some of these include photo timer, touch plate controller, car wiper control, car lights turn off, flashers, generators, delays auto power on and off, Ni-Cd charger, frequency divider, light operated relay, etc. An ideal book for the electronic hobbyist and experimenter.

- 43 Pages



	CAT.	Qty 1+
Soft cover 138 x 208mm	BM-2466	\$7.00

## Tech Talk: Basic Logic Functions



AND

A	B	Q
0	0	0
0	1	0
1	0	0
1	1	1



NAND

A	B	Q
0	0	1
0	1	1
1	0	1
1	1	0



OR

A	B	Q
0	0	0
0	1	1
1	0	1
1	1	1



NOR

A	B	Q
0	0	1
0	1	0
1	0	0
1	1	0



XOR

A	B	Q
0	0	0
0	1	1
1	0	1
1	1	0



XNOR

A	B	Q
0	0	1
0	1	0
1	0	0
1	1	1

## IC SOCKETS

### PRODUCTION PCB MOUNT

Makes it easy to remove or replace your IC without desoldering.

- Solder tail
- All tin plated phosphor bronze or beryllium copper
- 0.1" (2.54mm) pitch

#### LOW COST



PINS	WIDTH	CAT.	Qty 1+	Qty 10+	Qty 25+
6	0.3"	PI-6499	\$0.36	\$0.32	\$0.29
8	0.3"	PI-6500	\$0.38	\$0.34	\$0.30
14	0.3"	PI-6501	\$0.40	\$0.36	\$0.32
16	0.3"	PI-6502	\$0.45	\$0.41	\$0.36
18	0.3"	PI-6503	\$0.50	\$0.45	\$0.40
20	0.3"	PI-6504	\$0.55	\$0.50	\$0.44
22	0.3"	PI-6505	\$0.60	\$0.54	\$0.48
24	0.6"	PI-6506	\$0.65	\$0.59	\$0.52
28	0.6"	PI-6507	\$0.80	\$0.72	\$0.64
28	0.3"	PI-6510	\$0.75	\$0.68	\$0.60
40	0.6"	PI-6508	\$1.00	\$0.85	\$0.75

### GOLD INSERT MACHINED PIN

- Anti-wicking very high quality
- Ideal for professional / portable or field service equipment
- 0.1" (2.54mm) pitch



PINS	WIDTH	CAT.	Qty 1+	Qty 10+	Qty 25+
6	0.3"	PI-6450	\$1.15	\$1.00	\$0.90
8	0.3"	PI-6452	\$1.25	\$1.10	\$1.00
14	0.3"	PI-6454	\$1.40	\$1.25	\$1.10
16	0.3"	PI-6456	\$1.65	\$1.45	\$1.30
18	0.3"	PI-6458	\$2.45	\$2.20	\$1.95
20	0.3"	PI-6460	\$2.65	\$2.35	\$2.07
22	0.3"	PI-6462	\$2.75	\$2.45	\$2.15
28	0.6"	PI-6466	\$3.25	\$2.90	\$2.60
40	0.6"	PI-6468	\$4.50	\$3.95	\$3.60

### IC SOCKET STRIPS

#### WIRE WRAP PINS

- Gold insert
- 0.1" (2.54mm) pitch
- Machined pin



PINS	CAT.	Qty 1+	Qty 10+	Qty 25+
20 Way	PI-6473	\$5.95	\$5.25	\$4.75
32 Way	PI-6472	\$8.50	\$7.50	\$6.75

### STANDARD PINS

- Gold insert
- 0.1" (2.54mm) pitch
- Machined pin



PINS	CAT.	Qty 1+	Qty 10+	Qty 25+
32 Way	PI-6470	\$3.95	\$3.50	\$3.15

### ZIF SOCKETS

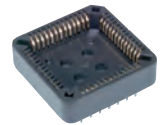
Zero Insertion Force. Drop the device in and close the lever to contact pins. Ideal for production testing.



PINS	CAT.	Qty 1+	Qty 10+	Qty 25+
18	PI-6480	\$4.95	\$4.45	\$3.95
28	PI-6483	\$6.95	\$6.25	\$5.55
40	PI-6484	\$7.95	\$7.15	\$6.35

### PLCC SOCKETS - THROUGH HOLE

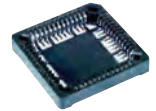
- Gold plated phosphor bronze contacts.
- Height: 7.7mm



SIZE	SIZE L X W mm	CAT.	Qty 1+	Qty 10+	Qty 25+
28 Pin	18 x 18	PI-6600	\$2.95	\$2.60	\$2.40

### SURFACE MOUNT

- Silver plated phosphor bronze contacts
- Height: 4.5mm



SIZE	SIZE L X W mm	CAT.	Qty 1+
84 pin	36 x 36	PI-6630	\$0.95

## MEMORY CARD SOCKETS - SURFACE MOUNT

### IC/SMART CARD ACCEPTOR

These modules are for use in circuit designs incorporating the use of Smart Cards/ IC Cards. They accept either card and feature an internal SPST switch, which is triggered by card insertion. Data sheets and specifications are on our website.



	CAT.	Qty 1+
Through Hole Mount	PS-0010	\$4.95

## SMART CARDS

### WAFER CARDS

With PIC16F84A + 24LC16B Inbuilt (GOLD). This is a multi-chip 'smart card' based on the PIC 16F84A and is coupled with a 24LC16B EEPROM, and compatible with most reader/programmer units available.

- 16K memory
- ISO 7816-1 compatible pin-out and card body
- DC to 10 MHz operating speed
- Reprogrammable with code protection
- 1024 x 14 on-chip programmable memory
- 64 x 8 internal EEPROM memory
- Enhanced code protection
- Greater than 1,000,000 Write / Erase cycles



	CAT.	Qty 1+	Qty 10+	Qty 25+
Gold	ZZ-8800	\$5.95	\$5.35	\$4.15

## WIRELESS SYSTEMS

### 433MHZ WIRELESS MODULES

Pre-built 433MHz wireless transmitter / receiver modules featuring ASK encoding and are ideal for devices using short data bursts such as remote controls, trigger pulses etc.



SPECIFICATIONS	ZW-3100	ZW-3102
Output Power	3dBm.	
Supply Voltage	3VDC	5VDC
Supply Current	10mA max	10mA max
Data Rate	300bps to 10kbps	300bps to 10kbps
PCB (Excl Pins)	18.5(H) x 14.5(W)mm	42(H) x 11(W)mm

	CAT.	Qty 1+	Qty 10+	Qty 25+
Transmitter	ZW-3100	\$13.95	\$12.35	\$10.95
Receiver	ZW-3102	\$13.95	\$12.35	\$10.95

## Automatic Account:

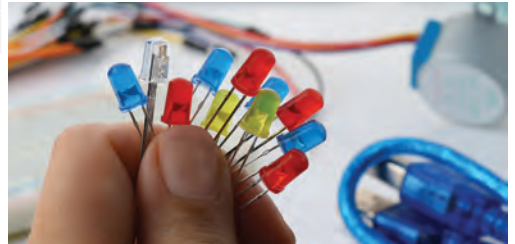
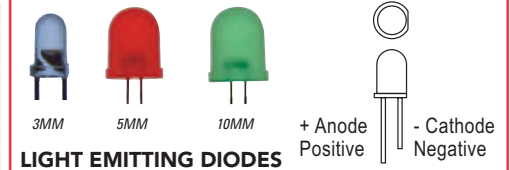
For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.



## STANDARD LEDs

<b>Viewing Angle</b>	Is the complete angle where the luminous intensity is half the on-axis intensity.
<b>Wavelength</b>	Dominant Wavelength of the light emitted in nm (nanometers). This determines the colour of the LED.
<b>IF Typical</b>	Continuous forward current in mA to obtain typical optical characteristics.
<b>VF Typical</b>	Continuous forward voltage in Volts to obtain typical optical characteristics.
<b>IF Max</b>	Maximum continuous forward current in mA at 25°C.
<b>VDD Typical</b>	Operating voltage to obtain typical optical characteristics.
<b>VDD Max</b>	Absolute maximum supply voltage at 25°C.
<b>IV Typical</b>	Light emitted from the LED is quantified by a single point, ie the on-axis luminous intensity value in mcd (millicandela) at IF Typical.

- Luminous intensity (IV) does not represent total light output from an LED. Both the luminous intensity & the spatial radiation pattern (viewing angle) must be taken into account
- If two LEDs have the same luminous intensity value, the lamp with the larger viewing angle will have the higher total light output
- Maximum luminous intensity can be achieved by operating the LED in pulsed mode, or maximum continuous forward current



### 3MM LEDs

OPTICAL & ELECTRONIC CHARACTERISTICS									PREFERRED VALUES SERIES RESISTOR (Ω) FOR							*Cree®
SIZE	VIEWING ANGLE	COLOUR	LENS	WAVELENGTH, CHROMATIC CO-ORD.	IF TYPICAL	VF TYPICAL	IV TYPICAL	MAX CONT. IF MAX	5VDC	9VDC	12VDC	CAT.	Qty 1+	Qty 10+	Qty 25+	
3mm	45°	Red	Diffused	650nm	15mA	2.3V	8mcd	15mA	180	470	680	ZD-0100	\$0.25	\$0.23	\$0.18	
3mm	15°	Red	Waterclear	660nm	20mA	1.8V	1500mcd	30mA	160	360	510	ZD-0102	\$0.70	\$0.63	\$0.49	
3mm	20°	Red	Waterclear	625nm	20mA	2.0V	2800mcd	50mA	150	360	510	ZD-0104	\$1.45	\$1.30	\$0.99	
3mm	15°	Red	Waterclear	625nm	20mA	2.1V	7200mcd	30mA	150	360	510	ZD-0106	\$4.45	\$3.95	\$3.05	
3mm	45°	Orange	Diffused	625nm	20mA	1.9V	30mcd	30mA	160	360	510	ZD-0119	\$0.35	\$0.32	\$0.25	
3mm	50°	Yellow	Diffused	585nm	20mA	2.1V	10mcd	20mA	150	360	510	ZD-0110	\$0.25	\$0.23	\$0.18	
3mm	20°	Yellow	Waterclear	588nm	20mA	2.0V	3000mcd	50mA	150	360	510	ZD-0112	\$1.75	\$1.55	\$1.20	
3mm	15°	Yellow	Waterclear	588nm	20mA	2.2V	7200mcd	50mA	150	360	510	ZD-0114	\$3.95	\$3.50	\$2.75	
3mm	50°	Green	Diffused	573nm	20mA	2.3V	40mcd	20mA	130	330	470	ZD-0120	\$0.25	\$0.23	\$0.18	
3mm	20°	Green	Waterclear	568nm	20mA	2.1V	500mcd	30mA	150	360	510	ZD-0122	\$1.45	\$1.30	\$0.99	
3mm	20°	Green	Waterclear	520nm	20mA	3.2V	6500mcd	20mA	91	300	470	ZD-0124	\$6.45	\$5.75	\$4.45	
3mm	15°	Aqua	Waterclear	505nm	20mA	3.5V	4000mcd	30mA	30	75	270	ZD-0126	\$5.45	\$4.90	\$3.75	
3mm	15°	Blue	Waterclear	465nm	20mA	3.3V	1500mcd	20mA	82	300	430	ZD-0130	\$2.75	\$2.45	\$1.90	
3mm	15°	Blue	Waterclear	470nm	20mA	3.2V	6000mcd	30mA	91	300	430	ZD-0132	\$5.95	\$5.25	\$4.15	
3mm	15°	White	Waterclear	0.31/0.32nm	20mA	3.2V	1000mcd	20mA	91	300	430	ZD-0140	\$2.75	\$2.45	\$1.90	
3mm	20°	White	Waterclear	0.31/0.32nm	20mA	3.2V	4300mcd	30mA	91	300	430	ZD-0142	\$3.95	\$3.50	\$2.75	

### 5MM LEDs

OPTICAL & ELECTRONIC CHARACTERISTICS									PREFERRED VALUES SERIES RESISTOR (Ω) FOR							*Cree®
SIZE	VIEWING ANGLE	COLOUR	LENS	WAVELENGTH, CHROMATIC CO-ORD.	IF TYPICAL	VF TYPICAL	IV TYPICAL	MAX CONT. IF MAX	5VDC	9VDC	12VDC	CAT.	Qty 1+	Qty 10+	Qty 25+	
5mm	50°	Red	Diffused	700nm	20mA	2.3V	12mcd	30mA	130	330	470	ZD-0150	\$0.30	\$0.27	\$0.21	
5mm	15°	Red	Waterclear	660nm	20mA	1.7V	1200mcd	30mA	160	360	510	ZD-0152	\$0.85	\$0.77	\$0.60	
5mm	15°	Red	Waterclear	625nm	20mA	2.0V	3800mcd	50mA	150	360	510	ZD-0154	\$1.45	\$1.30	\$0.99	
5mm	15°	Red	Waterclear	625nm	20mA	2.1V	9600mcd	50mA	150	360	510	ZD-0156	\$3.45	\$3.05	\$2.35	
5mm	15°	Red	Waterclear	624*nm	30mA	2.1V	23500mcd	30mA	100	240	330	ZD-0293	\$5.45	\$4.90	\$3.75	
5mm	8°	Red	Waterclear	616nm	50mA	2.1V	20000mcd	50mA	62	150	200	ZD-1790	\$4.45	\$3.95	\$3.05	
5mm	40°	Orange	Diffused	635nm	20mA	2.0V	80mcd	30mA	150	360	510	ZD-0169	\$0.30	\$0.27	\$0.21	
5mm	50°	Yellow	Diffused	585nm	20mA	2.1V	70mcd	30mA	150	360	510	ZD-0160	\$0.30	\$0.27	\$0.21	
5mm	15°	Yellow	Waterclear	590nm	20mA	2.2V	2500mcd	20mA	150	360	510	ZD-0162	\$1.45	\$1.30	\$0.99	
5mm	15°	Yellow	Waterclear	588nm	20mA	2.0V	4000mcd	50mA	150	360	510	ZD-0164	\$1.65	\$1.45	\$1.15	
5mm	15°	Yellow	Waterclear	588nm	20mA	2.3V	12000mcd	50mA	130	330	470	ZD-0166	\$4.25	\$3.75	\$2.95	
5mm	15°	Yellow	Waterclear	591*nm	30mA	2.1V	23500mcd	30mA	100	230	330	ZD-0295	\$5.45	\$4.90	\$3.75	
5mm	50°	Green	Diffused	570nm	20mA	2.3V	80mcd	30mA	130	330	470	ZD-0170	\$0.30	\$0.27	\$0.21	
5mm	30°	Green	Waterclear	525nm	20mA	3.5V	7500mcd	30mA	75	270	430	ZD-0172	\$2.35	\$2.09	\$1.60	
5mm	15°	Green	Waterclear	515nm	20mA	3.5V	8500mcd	30mA	75	270	430	ZD-0174	\$4.25	\$3.75	\$2.95	
5mm	20°	Green	Waterclear	525nm	20mA	3.2V	10000mcd	20mA	91	300	430	ZD-0176	\$5.45	\$4.90	\$3.75	
5mm	15°	Green	Waterclear	527*nm	30mA	3.2V	64600mcd	30mA	62	200	300	ZD-0292	\$6.45	\$5.75	\$4.45	
5mm	15°	Aqua	Waterclear	505nm	20mA	3.5V	7000mcd	30mA	75	270	430	ZD-0178	\$4.45	\$3.95	\$3.05	
5mm	40°	Blue	Diffused	470nm	20mA	3.3V	350mcd	30mA	82	300	430	ZD-0185	\$2.35	\$2.09	\$1.60	
5mm	15°	Blue	Waterclear	468nm	20mA	3.2V	2500mcd	30mA	91	300	430	ZD-0180	\$2.75	\$2.45	\$1.90	
5mm	15°	Blue	Waterclear	470nm	20mA	3.2V	6500mcd	30mA	91	300	430	ZD-0182	\$4.45	\$3.95	\$3.05	
5mm	15°	Blue	Waterclear	470*nm	30mA	3.2V	23500mcd	30mA	62	200	300	ZD-0291	\$5.45	\$4.90	\$3.75	
5mm	30°	White	Waterclear	0.31/0.31nm	20mA	3.2V	4000mcd	30mA	91	300	430	ZD-0190	\$2.75	\$2.45	\$1.90	
5mm	20°	White	Waterclear	0.31/0.32nm	20mA	3.2V	7000mcd	30mA	91	300	430	ZD-0192	\$3.75	\$3.30	\$2.60	
5mm	15°	White	Waterclear	0.31/0.32nm	20mA	3.3V	18000mcd	30mA	82	300	430	ZD-0195	\$5.50	\$4.90	\$3.75	
5mm	15°	White	Waterclear	0.29/0.29*nm	30mA	3.2V	45000mcd	30mA	62	200	300	ZD-0290	\$5.75	\$5.15	\$3.95	
5mm	30°	UV	Waterclear	405nm	20mA	3.3V	60mcd	20mA	91	300	430	ZD-0260	\$5.50	\$4.90	\$3.75	

## STANDARD LEDs (CONTINUED)

### 10MM LEDs

OPTICAL & ELECTRONIC CHARACTERISTICS										PREFERRED VALUES SERIES RESISTOR (Ω) FOR				*Cree®		
SIZE	VIEWING ANGLE	COLOUR	LENS	WAVELENGTH, CHROMATIC CO-ORD.	IF TYPICAL	VF TYPICAL	IV TYPICAL	MAX CONT. IF MAX		5VDC	9VDC	12VDC	CAT.	Qty 1+	Qty 10+	Qty 25+
10mm	16°	Red	Diffused	635nm	20mA	2.0V	8mcd	20mA		150	360	510	ZD-0200	\$0.75	\$0.68	\$0.53
10mm	30°	Red	Waterclear	625nm	20mA	2.0V	5600mcd	50mA		150	360	510	ZD-0201	\$1.45	\$1.30	\$0.99
10mm	30°	Red	Waterclear	625nm	20mA	2.0V	9600mcd	50mA		150	360	510	ZD-0202	\$2.75	\$2.45	\$1.90
10mm	20°	Orange	Waterclear	610nm	20mA	2.4V	10000mcd	50mA		130	330	470	ZD-0225	\$3.45	\$3.05	\$2.35
10mm	35°	Yellow	Diffused	585nm	20mA	2.0V	90mcd	30mA		150	360	510	ZD-0210	\$0.75	\$0.68	\$0.53
10mm	30°	Yellow	Waterclear	588nm	20mA	2.0V	6000mcd	50mA		150	350	510	ZD-0211	\$1.45	\$1.30	\$0.99
10mm	30°	Yellow	Waterclear	588nm	20mA	2.2V	9600mcd	50mA		150	360	510	ZD-0212	\$2.75	\$2.45	\$1.90
10mm	50°	Green	Diffused	570nm	20mA	2.2V	100mcd	20mA		150	360	510	ZD-0205	\$0.75	\$0.68	\$0.53
10mm	30°	Green	Waterclear	525nm	20mA	3.1V	9000mcd	20mA		100	300	430	ZD-0206	\$3.95	\$3.50	\$2.75
10mm	30°	Blue	Waterclear	470nm	20mA	3.5V	1200mcd	30mA		75	270	430	ZD-0215	\$3.95	\$3.50	\$2.75
10mm	30°	White	Waterclear	0.25/0.26nm	20mA	3.2V	5000mcd	30mA		91	300	430	ZD-0220	\$3.95	\$3.50	\$2.75

### 5 X 2MM RECTANGULAR LEDs

OPTICAL & ELECTRONIC CHARACTERISTICS										PREFERRED VALUES SERIES RESISTOR (Ω) FOR				*Cree®		
SIZE	VIEWING ANGLE	COLOUR	LENS	WAVELENGTH, CHROMATIC CO-ORD.	IF TYPICAL	VF TYPICAL	IV TYPICAL	MAX CONT. IF MAX		5VDC	9VDC	12VDC	CAT.	Qty 1+	Qty 10+	Qty 25+
5 x 2mm	155°	Red	Diffused	643nm	20mA	2.3V	5mcd	20mA		130	330	470	ZD-0230	\$0.50	\$0.45	\$0.35
5 x 2mm	155°	Yellow	Diffused	590nm	20mA	1.9V	10mcd	20mA		160	360	510	ZD-0234	\$0.50	\$0.45	\$0.35
5 x 2mm	155°	Green	Diffused	573nm	20mA	2.3V	15mcd	20mA		130	330	470	ZD-0232	\$0.50	\$0.45	\$0.35

### 5MM SUPERFLUX

5mm	90°	White	Waterclear	0.29/0.29*nm	35mA	3.6V	3000mcd	35mA		43	160	240	ZD-0020	\$6.50	\$5.75	\$4.45
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### BI LEDs

OPTICAL & ELECTRONIC CHARACTERISTICS										PREFERRED VALUES SERIES RESISTOR (Ω) FOR				*Cree®		
SIZE	VIEWING ANGLE	COLOUR	LENS	WAVELENGTH, CHROMATIC CO-ORD.	IF TYPICAL	VF TYPICAL	IV TYPICAL	MAX CONT. IF MAX		5VDC	9VDC	12VDC	CAT.	Qty 1+	Qty 10+	Qty 25+
3	65°	Red	Diffused	605nm	20mA	2.1V	20mcd			150	360	510	ZD-0248	\$1.25	\$1.10	\$0.85
	65°	Green	Diffused	570nm	20mA	2.3V	45mcd	30mA								
5	90°	Red	Diffused	625nm	20mA	2.1V	7.6mcd	30mA		150	360	510	ZD-0250	\$1.25	\$1.10	\$0.85
	90°	Green	Diffused	567nm	20mA	2.2V	10mcd	30mA								
10	75°	Red	Diffused	625nm	20mA	2.0V	10mcd	30mA		150	360	510	ZD-0255	\$1.45	\$1.30	\$0.99
	75°	Green	Diffused	570nm	20mA	2.1V	10mcd	30mA								
3	75°	Orange	Diffused	625nm	20mA	2.0V	4.5mcd	30mA		150	360	510	ZD-0249	\$1.25	\$1.10	\$0.85
	75°	Green	Diffused	570nm	20mA	2.1V	6mcd	30mA								
5	90°	Orange	Diffused	625nm	20mA	2.1V	70mcd	30mA		150	360	510	ZD-0252	\$1.35	\$1.20	\$0.90
	90°	Green	Diffused	568nm	20mA	2.2V	80mcd	30mA								
10	75°	Red	Diffused	625nm	20mA	2.0V	10mcd	30mA		150	360	510	ZD-0256	\$1.75	\$1.55	\$1.20
	75°	Green	Diffused	570nm	20mA	2.1V	10mcd	30mA								

### TRI LEDs

5 Common Cathode	45°	Red	Diffused	625nm	20mA	2.0V	600mcd	30mA		150	360	510	ZD-0270	\$7.45	\$6.65	\$5.15
	45°	Green	Diffused	520nm	20mA	3.5V	1000mcd	30mA		75	270	430				
	45°	Blue	Diffused	470nm	20mA	3.5V	200mcd	30mA		75	270	430				
5 Superflux Common Anode	60°	Red	Waterclear	643nm	20mA	1.8V	200mcd	20mA		160	360	510	ZD-0010	\$5.75	\$5.15	\$3.95
	60°	Green	Waterclear	528nm	20mA	3.2V	900mcd	20mA		91	300	470				
	60°	Blue	Waterclear	468nm	20mA	3.2V	150mcd	20mA		91	300	470				

### FLASHING LEDs

OPTICAL & ELECTRONIC CHARACTERISTICS										ABSOLUTE MAX VDD						
	SIZE (MM)	VIEWING ANGLE	COLOUR	LENS	WAVELENGTH, CHROMATIC CO-ORD.	IF TYPICAL	VDD TYPICAL	IV TYPICAL		MAX	CAT.	Qty 1+	Qty 10+	Qty 25+		
Flashing	5	50°	Red	Diffused	630nm	20mA	5.0V	50mcd		10mA	ZD-0240	\$1.45	\$1.30	\$0.99		
Flashing	5	30°	Red	Diffused	643nm	20mA	5.0V	60mcd		10mA	ZD-1785	\$2.35	\$2.09	\$1.60		
Flashing	5	45°	Yellow	Diffused	597nm	20mA	5.0V	35mcd		10mA	ZD-0244	\$1.45	\$1.30	\$0.99		
Flashing	5	45°	Green	Diffused	568nm	20mA	5.0V	35mcd		10mA	ZD-0242	\$1.45	\$1.30	\$0.99		
Flashing	5	40°	Blue	Diffused	470nm	20mA	5.0V	900mcd		10mA	ZD-0245	\$2.35	\$2.09	\$1.60		
Flashing	10	50°	Red	Diffused	660nm	20mA	5.0V	50mcd		10mA	ZD-1965	\$2.85	\$2.53	\$1.95		

### TRI COLOUR SEQUENCING LEDs

Tri Colour Sequencing	5	30°	Red	Waterclear	625nm	20mA	4.5V	500mcd	4.5mA	ZD-0247	\$7.75	\$6.90	\$5.25
		30°	Green	Waterclear	520nm	20mA	4.5V	5000mcd	4.5mA				
		30°	Blue	Waterclear	470nm	20mA	4.5V	2000mcd	4.5mA				





## LED PACKS - STANDARD & SMD

### LED PACKS

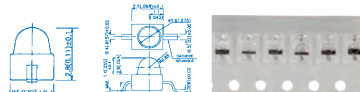
• 5-20mcd @ 20mA typical

	CAT.	Qty 1+	Qty 10+	Qty 25+
Red - 3mm Pkt 100	ZD-1692	\$13.95	\$12.35	\$9.75
Red - 5mm Pkt 100	ZD-1690	\$17.95	\$15.95	\$12.35
Assorted Pkt 100 - mixed colours, 3-5mm - bonus 10 x 5mm mounting hardware!	ZD-1694	\$29.95	\$26.90	\$20.70

### SMD LEDs

Range of 3 colours in "Gull Wing" style package.

• Water clear lens



PKT	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Red 10	625nm - 70mcd @ 20mA	ZD-2000	\$3.50	\$3.15	\$2.45
Yellow 10	590nm - 40mcd @ 20mA	ZD-2005	\$3.95	\$3.50	\$2.75
Green 10	565nm - 100mcd @ 20mA	ZD-2010	\$3.50	\$3.15	\$2.45

## LED ACCESSORIES

### LED CLIPS

- Black
- 3mm requires a 4mm panel hole, 5mm needs a 6.35mm
- Simply push clip in panel & insert LED

PKT	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Pkt 20	3mm	HP-1100	\$3.50	\$3.15	\$2.45
Pkt 20	5mm	HP-1102	\$3.50	\$3.15	\$2.45
Pkt 100	5mm	HP-1103	\$16.50	\$14.35	\$10.95

### 10MM LED BEZELS

- Black, requires a 14mm panel hole and simply snaps in. LED not included

PKT	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Pkt 5		HP-1110	\$8.95	\$7.95	\$6.25

### 100MM LIGHT TRANSPORTERS - PACK OF 3

These fibre optic light transporters are simply clipped over the LED and mounted to the panel. With high light conductivity the intensity will not diminish. Much easier to install than LED clips!

- Hole cut-out size: 3.5mm

PACK	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Suit SMD LEDs	3	HP-1192	\$12.95	\$11.35	\$8.95
Suit 3mm LEDs	3	HP-1193	\$12.95	\$11.35	\$8.95

### LED MOUNTS

3MM 3 WAY - HP-1118

5MM SINGLE 45° - HP-1114

SIZE	CAT.	Qty 1+	Qty 10+	Qty 25+
Pkt 20	3mm HP-1118	\$7.95	\$7.10	\$5.50
Pkt 20	5mm HP-1114	\$5.95	\$5.25	\$4.15
Pkt 100	5mm HP-1115	\$17.95	\$15.95	\$12.35

## LED MATRIX DISPLAYS

### 8X8 LED MATRIX

A 8x8 LED matrix module for simple graphical output display. Ideal for display of symbols, basic data, or graphics. 16 pin connection with 8 anode pins for column and 8 cathode pins for rows. Available in red or green.

SPECIFICATIONS	
Peak Wavelength	568nm
Luminous Intensity	15mcd
Forward Voltage(Vf)	2.2V
Forward Current (If)	40mA
Dimensions	32(H) x 32(W) x 8(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 25+
Green	ZD-1800	\$6.45	\$5.80	\$4.50
Red	ZD-1802	\$6.45	\$5.80	\$4.50

### 8X8 RGB LED MATRIX

A full 8x8 LED Matrix Display with a matte black background measuring 60mm x 60mm. Designed to mount directly on the XC-4498 RGB LED Driver module. These modules can be stacked for extended displays.

- Full 8x8 Matrix controlled through 32 pins (8 + 8 x 3)
- Flush edges for creating extended displays
- 192 LEDs in 64 pixels



	CAT.	Qty 1+	Qty 4+	Qty 25+
RGB	ZD-1810	\$19.95	\$17.95	\$13.95

## 7 SEGMENT LED DISPLAYS

### SMALL DISPLAYS

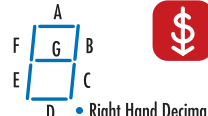
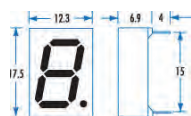
#### COMMON CATHODE

Standard 7 segment LED module for numerical output display.

Designed to be fitted in close format to allow display of larger numbers.

#### SPECIFICATIONS

Digit Dimensions	13.2(H) x 7.6(W)mm
Digit Height	17.5(H) x 12.3(W) x 7(D)mm
Common Part Number	FND500 / LTS543R / S505RWB
Forward voltage (Vf)	2.1V
Forward current (If)	10mA



COLOUR		CAT.	Qty 1+	Qty 10+	Qty 25+
Red	Common Cathode	ZD-1855	\$3.50	\$3.15	\$2.45
Red	Common Anode	ZD-1857	\$3.50	\$3.15	\$2.45
Blue	Common Cathode	ZD-1856	\$5.95	\$5.35	\$4.15

### SUPER LARGE DISPLAY - RED

#### COMMON CATHODE

Super large format 7 segment LED module for numerical output display. Designed to be fitted in close format to allow display of larger numbers.

#### SPECIFICATIONS

Digit Dimensions	56.8 (H) x 32.4 (W)mm
Package Dimensions	69.7(H) x 47.8(W) x 12(D)mm
Luminous Intensity (IV)	4mcd per segment @ 10mA
Viewing Angle	150°
Forward Voltage (VF)	Segments 8V, decimal 2V
Forward Current (IF)	50mA
Face Colour	Grey
Max Current Per Segment	30mA
Forward Current (IF)	10mA

	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	ZD-1850	\$9.95	\$8.95	\$6.95

## 16 SEGMENT LED DISPLAYS

### GREEN 16 SEGMENT LED DISPLAY

#### COMMON CATHODE

Full function 16 segment LED module for alphabetical and numerical output display. Designed to be fitted in close format to allow display of words and larger numbers.

#### SPECIFICATIONS

Digit Dimensions	20.3(H) x 11(W)mm
Package Dimensions	27.7(H) x 20.0(W) x 8.5(D)mm
Forward Voltage (VF)	2.2V
Forward Current (IF)	50mA

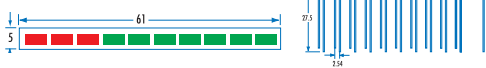
COLOUR		CAT.	Qty 1+	Qty 4+	Qty 10+
Green	Common Cathode	ZD-1824	\$6.45	\$5.80	\$4.50
Green	Common Anode	ZD-1826	\$6.45	\$5.80	\$4.50

## BAR GRAPHS & DISPLAYS

### LED BAR GRAPH

5mm x 2.5mm rectangular LEDs mounted in a black housing. Ideal for VU meters or where any visual level is required.

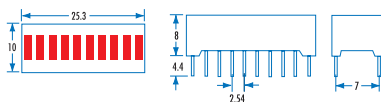
- VU 7 Green & 3 Red



CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1702	\$5.95	\$5.25	\$4.15

### DIL LED

Ten individual LED elements housed in a 20 pin package to form a compact linear bar display which may be stacked end to end to create bar graphs of different lengths. Will plug into a standard 20 pin IC socket. 10 red LEDs. Typical intensity is 2.2mcd per LED.

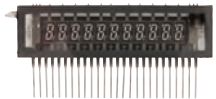


CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1704	\$4.95	\$4.45	\$3.45

### 11 DIGIT FLUORO DISPLAY

Vacuum fluorescent displays - still look the best. Each digit measures 6.0(H) x 3.5(W) mm, 11 digits in all. The display also features an apostrophe in the top right hand corner of the digits, and a semicolon (;) in the bottom in all 11 digits.

- Futaba brand
- Electrical and mechanical data is included



CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1880	\$2.95	\$2.60	\$1.95

### DRIVER IC ALLEGRO BRAND UDN6118A FOR FLUORO DISPLAY ABOVE.

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1882	\$9.95	\$8.75	\$6.75

### 4 DIGIT FIELD EFFECT LCD

Suitable for meters, gauges, timers, counters and 12/24hr clocks. Extremely easy to drive and no external driver IC required. 40 pin package. Use Cat PI-6470 for socket mounting (2pc required)

- Driving voltage: 3 volts
- Digit height: 12.7mm
- View area: 45 x 17 / Display size: 51 x 30.5mm
- Pin spacing: 2.5mm



CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1886	\$9.95	\$8.75	\$6.75

## BEZELS - LOW VOLTAGE

### 3MM LED BEZELS - 2V

Chrome housing.

- 2V, 15 - 30mA
- Panel hole 5mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2615	\$3.45	\$3.05	\$2.35
Green	SL-2616	\$3.45	\$3.05	\$2.35
Blue	SL-2617	\$4.50	\$3.95	\$3.15

### 5MM LED BEZELS - 2V

Chrome housing.

- 2V, 15 - 30mA
- Panel hole 8mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2610	\$2.35	\$2.09	\$1.60
Green	SL-2612	\$2.35	\$2.09	\$1.60
Blue	SL-2613	\$5.50	\$4.90	\$3.75

### MINI CHROME BEZELS - 12V

These are very classy and have a bright 3mm LED in the chrome casing which is only 10mm long.

- Hole cutout of only 5mm
- Supplied with flying leads about 100mm long
- Includes dropping resistor



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2644	\$3.95	\$3.50	\$2.75
Green	SL-2645	\$3.95	\$3.50	\$2.75

### CHROME BEZEL LED - 24V

Classy chrome casing with 3mm LED. Supplied with flying leads with resistor, 5mm hole required.



	CAT.	Qty 1+	Qty 10+	Qty 25+
Green	SL-2646	\$3.95	\$3.50	\$2.75
Red	SL-2647	\$3.95	\$3.50	\$2.75

### IP67 CHROME LED BEZELS - 12V

IP67 (waterproof) rated LED lamp bezel in a chrome housing. Perfect for applications where protection from dust and water ingress are required.

- 12VDC
- Panel hole: 8mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2625	\$7.95	\$6.95	\$5.50
Green	SL-2627	\$7.95	\$6.95	\$5.50

### LOW VOLTAGE BEZELS - 6 & 12V

Accepts Lilliput globes.

- Panel hole 10mm
- Length 29mm
- Requires Lilliput globes
- SL-2650 6V
- SL-2652 12V



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2620	\$2.25	\$2.00	\$1.80
Green	SL-2622	\$2.25	\$2.00	\$1.80

### LILLIPUT GLOBES TO SUIT BEZELS

- Total length 17mm
- Width 4.5mm
- Glass length 8mm



CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
6.3V 200mA	SL-2650	\$0.95	\$0.85	\$0.75
12V 120mA	SL-2652	\$0.95	\$0.85	\$0.75

### BEZEL SMALL - 12V

Red, sealed, 12 volt bright bezel for any application.

- Small size
- Panel hole 7mm
- Length 34mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2640	\$1.95	\$1.75	\$1.55

### BEZEL MEDIUM - 12V

Red, sealed, ideal for cars as an indicator for driving lights, etc.

- Also suitable for burglar alarms
- Panel cut out 10mm
- Rectangular lens 13 x 16mm
- Length 45mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2642	\$1.95	\$1.75	\$1.55

### 12V BEZEL LARGE - 12V

Perfect for car alarms.

- Orange lens which measures 20 x 20mm
- Panel hole 15mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Orange	SL-2694	\$2.95	\$2.60	\$2.30

## LED BEZELS - HIGH VOLTAGE

### CHROME BEZELS - 240V

Very smart units.

- Length 32mm
- 70mm leads
- Panel hole 7mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2632	\$3.45	\$3.05	\$2.75
Green	SL-2633	\$3.45	\$3.05	\$2.75

### BEZEL - 240V

Red, spade lug connections.

- Small round flat end
- Total length 45mm
- 10mm diameter
- Cut out hole 9mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	SL-2630	\$1.95	\$1.75	\$1.55

### 90V NE2 NEON

Would you believe it? After about 100 years of orange-red neons we now can get blue and green ones!

- Strike voltage: 82V
- Needs 270k resistor in series for 240V operation



	CAT.	Qty 1+	Qty 10+	Qty 25+
Orange/Red	SL-2690	\$1.25	\$1.10	\$1.00
Blue	SL-2695	\$1.25	\$1.10	\$1.00
Green	SL-2696	\$1.25	\$1.10	\$1.00

## COMPONENT LEAD FORMING TOOL

### COMPONENT LEAD FORMING TOOL

Get the hole spacing for your resistors and diodes perfect every time. This handy forming tool provides uniform hole spacing from 10 to 38mm.

Suitable for production assembly, education and training. The tool is double sided with one side for use with DO47 outline diodes (e.g. 1N914) and 1W Zener diodes; the other side being suitable for 1/4W resistors, DO41 outline diodes (e.g. 1N4004).

- Made in USA from engineering plastic
- Dimensions: 138(L)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1810	\$8.95	\$7.95	\$6.95



## ▼ INFRARED LEDs - RECEIVERS

### BP104 PHOTODIODE

Small square device measuring 4(W) x 5.4(L) x 2(D)mm.

SPECIFICATIONS	ZD-1947
Reverse Voltage	20V max
Forward Voltage	1.3V@100mA
Spectral Sensitivity	34uA @ 5V
Wavelength Of Max. Sens	950nm
Spectral Range Of Sensitivity	800 to 1100nm
Half Angle	±60°
Dark Current	2nA @ 10V
Open-Circuit Voltage	330mV
Short-Circuit Current	17uA
Rise And Fall Time	20ns @ 5V
Capacitance	48pF
Cathode Marking	flag on leg

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1947	\$4.35	\$3.90	\$2.95

### 5MM PHOTODIODE

Radiant sensitive area (receiving) is on the side of the device. Size 6.7(H) x 4.8(W)mm.

SPECIFICATIONS	ZD-1948
Reverse Voltage	32V
Spectral Range Of Sensitivity	970nm
Reverse Dark Current	5nA
Turn On/Off Time (Typical)	50ns
Capacitance	25pf
Open-Circuit Voltage	350mV

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1948	\$1.50	\$1.35	\$1.05

### INFRARED PHOTOTRANSISTOR

5mm LED with a clear transparent lens.

- Collector: Short leg
- Emitter: Long leg

SPECIFICATIONS	ZD-1950
Npn Collector-To-Emitter D'own Voltage	30V
Collector dark current	100nA@10V(Vce)
Emitter-To-Collector Breakdown Voltage	5V
Rise and fall time	3uS @ 5V (Vce)
Collector-To-Emitter Saturation Voltage	0.8V max
Power dissipation	100mW max

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1950	\$1.50	\$1.35	\$1.05

### IR LED RECEIVER

Consists of an infrared photo diode and signal processing circuitry, (amplifier, limiter, bandpass filter & demodulator). It will detect the modulated pulse from an IR Remote Control & give a TTL level output.

- Data sheet available - see website

SPECIFICATIONS	ZD-1952	Directivity Characteristics
Supply Voltage	5V typ.	
Supply Voltage Max	5.5V	Horizontal: 45°
Current Consumption	0.95mA	Vertical: 35°
Arrival Distance Length	12m typ.	
Centre Frequency	37.9kHz	

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1952	\$7.95	\$7.15	\$5.55

### TSOP4136 IR RECEIVER

Consists of PIN diode, pre-amplifier, AGC, pass filter, and demodulator. The main benefits are high speed data rates, short burst transmission codes, and suits cable TV remotes.

SPECIFICATIONS	ZD-1953	Directivity Characteristics
Supply Voltage	4.5-5.5V / Max 6V	
Current Consumption	1.2mA	Horizontal: 45°
Arrival Distance Length	20m	Vertical: 35°
Centre Frequency	36kHz	

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1953	\$2.75	\$2.45	\$1.90

## ▼ INFRARED LEDs - TRANSMITTERS

### 3MM EMITTING DIODE

With a blue transparent lens. Similar specifications as our ZD-1945.

SPECIFICATIONS	ZD-1946
Forward Current (If)	50mA
Peak Forward Current (Lp)	100mA
Forward Voltage (Vf)	1.3V
Power Dissipation (Pd)	100mW max

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1946	\$1.50	\$1.35	\$1.05

### 5MM EMITTING DIODE

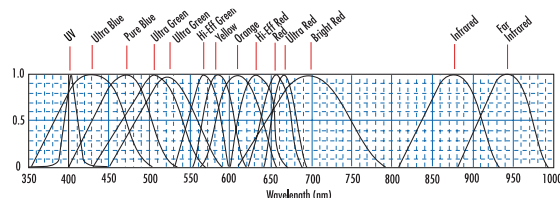
With a blue transparent lens.

SPECIFICATIONS	ZD-1945
Forward Current (Lf)	50mA max
Peak Forward Current (Lp)	1.2A
Forward Voltage (Vf)	1.2V @ 20mA
Power Dissipation (Pd)	100mW max
Peak Spectral Wavelength (Ir)	940nm@20mA
Spectral Band-width (Di)	50nm@20mA
Reverse Voltage (Vr)	5V max
Viewing Angle	30°
Material	GaAs

CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1945	\$1.50	\$1.35	\$1.05

## Tech Talk: Frequency Response Curve

Normalised Frequency Response Curve of LED Capability.



## ▼ LASERS

### 10MW LASER DIODE

10mW laser diode component

- Red in colour
- Supplied with 7mm dia collimating lens

SPECIFICATIONS	ZD-1955
Threshold Current	24mA
Operating Voltage	2.4V
Operating Current	40mA
Optical Power	10mW
LD reverse voltage	2V PD
Reverse voltage	30V
Dimensions	T0-18 (5.6mm dia)

SIZE	CAT.	Qty 1+	Qty 10+	Qty 25+
T0-18	ZD-1955	\$7.95	\$7.10	\$5.50

## ▼ LED TESTER

### LED TESTER

With this basic but essential tool it is possible to check the function, brightness, colour and polarity of most kinds of light emitting diodes (LED). The LED to be tested plugs into the front panel, at the current you wish to test it with. Two 10mA positions have been included on this multi-LED tester so that comparisons between two LEDs can be made simultaneously.

- Operating voltage: 9V (battery required)
- Test currents: 1mA, 2.5mA, 5mA, 10mA, 20mA, 50mA
- Dimensions: 58 x 44 x 25mm

CAT.	Qty 1+	Qty 3+	Qty 6+
AA-0274	\$13.95	\$12.35	\$10.95



## OPTOCOUPERS

### NON - ZERO CROSSING

- Excellent stability - IR emitting diode has low degradation
- High isolation voltage - minimum 7500VAC peak
- Underwriters Laboratory (UL) recognised - file# E90700
- Recommended for 240VAC RMS applications

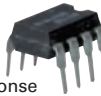
- Vending machines
- Industrial controls
- Triac driver
- Solid state relay
- Motor control
- Traffic lights



TYPE	PINS	CAT.	Qty 1+	Qty 10+	Qty 25+
MOC3020/MOC3021	6	ZD-1920	\$3.85	\$3.45	\$2.75

### PHOTOTRANSISTOR OPTOCOUPLER

- AC line / digital logic isolator
- Relay contact monitor
- Digital logic / digital logic isolator
- Power supply monitor
- Telephone / telegraph line receiver
- Small package size and low cost
- Twisted pair line receiver
- Excellent frequency response
- High frequency power supply
- UL recognised - file# E90700 feedback control



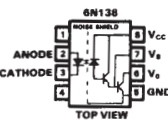
TYPE	PINS	CAT.	Qty 1+	Qty 10+	Qty 25+
4N28/4N25	6	ZD-1928	\$1.95	\$1.75	\$1.35

### DARLINGTON OPTOCOUPLER

- Low current - 0.5mA
- Superior CTR-2000%
- Superior CMR-10 kV/μs
- Double working voltage 480VRMS
- CTR guaranteed 0-70°C
- UL recognised file# E90700
- Dual channel - HCPL2730, HCPL2731

#### Applications:

- Digital logic ground isolation
- Telephone ring detector
- EIA-RS232C line receiver
- High common mode noise line receiver
- μP bus location
- Current loop receiver



TYPE	PINS	CAT.	Qty 1+	Qty 10+	Qty 25+
6N138	8	ZD-1940	\$4.95	\$4.45	\$3.45

### SMD OPTOCOUPERS



TYPE	PINS	PKT	CAT.	Qty 1+	Qty 10+	Qty 25+
4N35S	SOIC6	10	ZD-1934	\$11.95	\$10.70	\$8.25
TLPI13	SOIC6	EA	ZD-1941	\$6.95	\$6.25	\$4.75

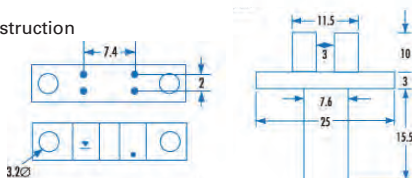
### PHOTO INTERRUPTER

This device enables you to turn a circuit on and off optically. It consists of a moulded plastic housing with an IR LED facing a phototransistor across a gap. Any object in the gap will interrupt the IR beam and consequently switch the phototransistor on and off. The device is very fast and ideal for counting, timing or sensing. Full specs supplied with each unit.

- PCB or chassis mounting
- Low cost
- Rugged one piece construction
- Very fast

#### Application:

- Counter sensor
- Tachometer
- Opto ignition
- Edge sensor
- Tape end sensor



CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1901	\$4.45	\$3.95	\$3.05

### COMPATABILITY ICONS:

To assist you in selecting compatible products for your preferred microcontroller, we have created two icons. They should help you select appropriate modules and hardware. If in doubt, ask our friendly team.

Arduino® Compatible



Raspberry Pi Compatible



## HALL EFFECT DEVICES

### HALL EFFECT SENSOR

#### UGN3503U HALL EFFECT SENSOR IC

A miniature sensor to accurately track extremely small changes in magnetic flux density - changes generally too small to operate Hall effect switches. Applications include notch sensor, current monitor, gear tooth sensor, etc.

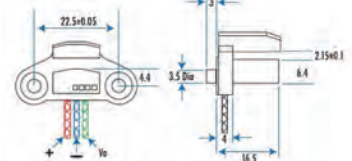


SPECIFICATIONS	ZD-1902
Operating Voltage	4.5 - 6VDC
Supply Current	Typ. 9mA
Output Voltage	Typ. 2.5V DC
Output Resistance	50Ω
Size	4.5(W) x 4.5(H) x 1.5(D)mm

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
UGN3503U	ZD-1902	\$7.75	\$6.90	\$6.15

### HKZ-101 HALL EFFECT SWITCH

A rugged Hall effect switch designed for automotive ignition applications. This device consists of a Hall effect semiconductor sensor separated across a small gap by a magnet. In its normal state the Hall sensor (with inbuilt output transistor) is conducting. It will sink up to 40mA between the impressive temperature range of -40 to +150°C. When an iron vane is introduced into the gap between the Hall element and the magnet, the output transistor switches off. The sensor is hermetically sealed, resistant to petroleum products and incorporates metal bushing mounting holes to facilitate fitting to a carrier plate, bracket etc. Lead connections: Red V+, Black earth, Green signal (on/off).



CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1900	\$24.95	\$22.35	\$19.70

## PRESSURE SENSOR

### PRESSURE DIFFERENTIAL SENSOR

The ZD-1904 piezo resistive pressure sensor provides a very accurate and linear voltage output directly proportional to the applied pressure. The sensor housed a single monolithic silicon die with a strain gauge and thin film resistor network on each chip.

- 0°C to 85°C temperature compensation
- 0 to 10kPa (0 to 1.45 psi)
- 25mV full scale span



CAT.	Qty 1+	Qty 10+	Qty 25+
ZD-1904	\$44.95	\$40.45	\$35.90

## PROXIMITY SENSOR

### IR ADJUSTABLE PROXIMITY SENSOR

An easy to use IR proximity sensor in adjustable threaded package for straightforward mounting.

- 5V supply for compatibility with logic level applications
- Use with Arduino by setting sensor pin to INPUT\_PULLUP mode
- 3-80cm detect range (adjustable via trimpot)
- Modulated IR to avoid interference from ambient light
- Output can sink up to 100mA for driving relays directly



	CAT.	Qty 1+	Qty 10	Qty 25
IR Adjustable Proximity Sensor	ZD-1906	\$16.95	\$14.95	\$13.45

### Where's My Local Jaycar Store?:

Use our store finder on our website. With over 300 Jaycar Store and Stockists just type in your postcode or area to find the closest one to you.



## ▼ GLOBES

### ILLUMINATED DOORBELL GLOBE

Replacement globe for our doorbell SP-0782 switch, can be used as a replacement for other brand doorbells.

- Length 27mm.
- Globe is 12V, but will work on lower voltages.



CAT.	Qty 1+	Qty 10+	Qty 25+
SL-2720	\$1.95	\$1.75	\$1.55

### 14V CAR ALARM SWITCH REPLACEMENT GLOBES

Replacement globes for flashing switches / bezels for car alarms.

- BI - pin • TI • 14 volt • 2.54 lead spacing



CAT.	Qty 1+	Qty 10+	Qty 25+
SL-2636	\$3.85	\$3.45	\$2.95

**Bye, Bye Torch Globes. We will be phasing out many of these traditional filament globes over the next few years. LED globes are just too superior. If you still use these types, start hoarding them now!**

### MINI LAMPS

A large range of various sizes & voltages of mini lamps.

- Supplied with wiring cable pre connected.



Qty Prices For One Type Only

SMALL SIZE	VOLTS	CAT.	COLOUR
Globe Size - 3(Ø) x 7mm	1.5	SL-2680	White
Pvc Lead Length - 100mm	3	SL-2681	Red
Current - 0.1A	6	SL-2683	Blue
	9	SL-2684	Green
	12	SL-2685	Yellow
LARGE SIZE	VOLTS	CAT.	COLOUR
Globe Size - 4(Ø) x 10mm	1.5	SL-2670	White
PVC Lead Length - 150mm	3	SL-2671	Red
Current - 0.1A	6	SL-2673	Blue
	9	SL-2674	Green
	12	SL-2675	Yellow

CAT.	Qty 1+	Qty 10+	Qty 25+
All Types Each	\$1.30	\$1.15	\$1.01

### LILLIPUT GLOBES

- Total length 17mm.
- Width 4.5mm.
- Glass length 8mm.



CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
6.3V 200mA	SL-2650	\$0.95	\$0.85	\$0.75
12V 120mA	SL-2652	\$0.95	\$0.85	\$0.75

### MINIATURE EDISON SCREW GLOBES

- Total length 27mm.
- Width 9mm.
- Glass length 14mm.



CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
6.3V 250mA	SL-2654	\$0.85	\$0.75	\$0.65
12V 100mA	SL-2656	\$0.85	\$0.75	\$0.65

**MES means:**  
'Miniature Edison Screw'.

**Find Out More In Store:**  
Our staff offer friendly and helpful service. We're here to help.

## ▼ TORCH GLOBES & NEONS

### FLANGE TYPE KRYPTON TORCH GLOBES

Krypton globes give up to 70% more light output compared to standard globes.

2.2V 470mA - Suits 2 x AA batteries CAT. SL-3200

2.4V 520mA - Suits 2 x C batteries CAT. SL-3202

2.4V 700mA - Suits 2 x D batteries CAT. SL-3204

2.4V 700mA - Suits 3 x D batteries CAT. SL-3206

4.8V 750mA - Suits 4 x D batteries CAT. SL-3208



	CAT.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	All Types	\$2.95	\$2.60	\$2.30

### Monthly Specials:

Lookout for our monthly promotions in store and online.

### 2.5V KRYPTON TORCH GLOBE - MES

- 300mA
- Suitable for 2 1.5V batteries
- Miniature Edison Screw



	CAT.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3210	\$2.65	\$2.30	\$2.07

### 4.8V KRYPTON TORCH GLOBE - MES

- 300mA
- Miniature Edison Screw



	CAT.	Qty 1+	Qty 10+	Qty 25+
Each	SL-3211	\$1.95	\$1.75	\$1.55

### GLOBE HOLDER

Standard MES globe holder (Torch globes).

- Suits SL-2654/6



CAT.	Qty 1+	Qty 10+	Qty 50+
SL-2658	\$0.95	\$0.85	\$0.75

### 90V NE2 NEON

Would you believe it? After about 100 years of orange-red neons we now can get blue and green ones! You'll buy one out of curiosity!

- Strike voltage: 82V
- Needs 270k resistor in series for 240V operation.



	CAT.	Qty 1+	Qty 10+	Qty 25+
Orange/Red	SL-2690	\$1.25	\$1.10	\$1.00
Blue	SL-2695	\$1.25	\$1.10	\$1.00
Green	SL-2696	\$1.25	\$1.10	\$1.00

### BAKELITE GLOBE HOLDER

High quality MES globe holder with a round bakelite base.

- No soldering required.
- Holder can easily be screwed to a base plate.
- Diameter 33mm / Height 19mm.
- Suits SL-2654/6
- Ideal as a simple pilot lamp



CAT.	Qty 1+	Qty 10+	Qty 50+
SL-2659	\$2.95	\$2.60	\$2.30

## ▼ HALOGEN GLOBES

### Handling Halogen Globes

Due to the high temperature of the halogen globes the glass envelope can crack unless it is very clean. If you leave grease or fingerprints on the globe, clean the glass with methylated spirits (preferably) before using.

### 12V 5W HALOGEN GLOBE

- 12V @ 5W.
- 4mm pin spacing.
- 8mm pin length
- Total length: 30mm
- Bulb dia: 8mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3216	\$5.95	\$5.25	\$4.75

### 12V 10W HALOGEN GLOBE

Halogen globe for illuminated fogger.

- 12V, 10 watts
- 4mm pin spacing.
- Pin length: 8mm
- Total length: 30mm.
- Bulb dia: 8mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Pkt 2	SL-3217	\$5.95	\$5.25	\$4.75

### 12V 50W HALOGEN GLOBE

Same as 100W unit, but this one is 50W.



	CAT.	Qty 1+	Qty 10+	Qty 25+
12V 50W	SL-2726	\$5.95	\$5.25	\$4.75

### 12V 100W HALOGEN GLOBE

These are used in hand held spotlights.

- Fitting and contact is by 2 pins which are 6mm apart.
- Length including pins is 40mm.



	CAT.	Qty 1+	Qty 10+	Qty 25+
12V 100W	SL-2724	\$4.95	\$4.45	\$3.90

### 12V JC HALOGEN GLOBE

2 pin halogen globes.

- As used in some models of our garden lighting.
- Fitting and contact is by 2 pins, 22mm long, pin spacing: 3mm, 8mm dia, 8mm pins.



	CAT.	Qty 1+	Qty 10+	Qty 25+
12V 20W	SL-2722	\$3.95	\$3.45	\$3.15

## ✓ SILICON BIPOLAR TRANSISTORS - MAJOR BRANDS

- Major brands only
- Resin moulded or hermetic metal cases.



TO-264



SOT-93



TO-220



TO-218



TO-126



TO-92



TO-3



TO-39

TYPE	POLARITY	CASE	PD@25°C	VC	IC	HFE MIN/MAX	@ IC CONT.	CAT.	Qty 1+	Qty 10+	Qty 25+
BC327	PNP	TO-92	625mW	50	800mA	100/630	100mA	ZT-2110	\$0.48	\$0.43	\$0.34
BC328	PNP	TO-92	625mW	30	800mA	100/630	100mA	ZT-2112	\$0.48	\$0.43	\$0.34
BC337	NPN	TO-92	625mW	50	800mA	100/630	100mA	ZT-2115	\$0.48	\$0.43	\$0.34
BC338	NPN	TO-92	625mW	30	800mA	100/630	100mA	ZT-2116	\$0.48	\$0.43	\$0.34
BC639	NPN	TO-92	830mW	80	1A	63/250	150mA	ZT-2179	\$0.95	\$0.85	\$0.65
BC546	NPN	TO-92	500mW	80	100mA	110/220	2mA	ZT-2150	\$0.30	\$0.27	\$0.21
BC547	NPN	TO-92	500mW	50	100mA	110/800	2mA	ZT-2152	\$0.30	\$0.27	\$0.21
BC548	NPN	TO-92	500mW	30	100mA	110/800	2mA	ZT-2154	\$0.30	\$0.27	\$0.21
BC549	NPN	TO-92	500mW	30	100mA	110/800	2mA	ZT-2156	\$0.30	\$0.27	\$0.21
BC550	NPN	TO-92	500mW	50	100mA	110/800	2mA	ZT-2160	\$0.38	\$0.34	\$0.27
BC556	PNP	TO-92	500mW	80	100mA	125/475	2mA	ZT-2162	\$0.38	\$0.34	\$0.27
BC557	PNP	TO-92	500mW	50	100mA	125/800	2mA	ZT-2164	\$0.30	\$0.27	\$0.21
BC558	PNP	TO-92	500mW	30	100mA	110/800	2mA	ZT-2166	\$0.30	\$0.27	\$0.21
BC559	PNP	TO-92	500mW	30	100mA	110/800	2mA	ZT-2168	\$0.30	\$0.27	\$0.21
BC640	PNP	TO-92	830mW	100	1A	63/250	150mA	ZT-2180	\$0.95	\$0.85	\$0.65
BD135	NPN	TO-126	8W	40	1.5A	63/250	150mA	ZT-2187	\$1.50	\$1.35	\$1.05
BD136	PNP	TO-126	8W	40	1.5A	63/250	150mA	ZT-2188	\$1.50	\$1.35	\$1.05
BD139	NPN	TO-126	8W	80	1.5A	63/250	150mA	ZT-2189	\$1.15	\$1.00	\$0.80
BD140	PNP	TO-126	8W	80	1.5A	63/250	150mA	ZT-2190	\$1.15	\$1.00	\$0.80
BD649	*NPN	TO-220	60W	100	8A	750	3A	ZT-2198	\$2.85	\$2.53	\$1.95
BD650	*PNP	TO-220	60W	100	8A	750	3A	ZT-2199	\$2.85	\$2.53	\$1.95
BD681	*NPN	TO-126	40W	100	4A	750	1.5A	ZT-2193	\$2.25	\$2.00	\$1.55
BD682	*PNP	TO-126	40W	100	4A	750	1.5A	ZT-2192	\$2.25	\$2.00	\$1.55
BF469	NPN	TO-126	1.8W	250	100mA	50	25mA	ZT-2200	\$2.45	\$2.20	\$1.95
BF470	PNP	TO-126	1.8W	250	100mA	50	25mA	ZT-2202	\$2.45	\$2.20	\$1.95

TYPE	POLARITY	CASE	PD@25°C	VC	IC	HFE MIN/MAX	@ IC CONT.	CAT.	Qty 1+	Qty 10+	Qty 25+
MJ10012*	NPN	TO-3	175W	600	10A	300	3A	ZT-2222	\$14.50	\$12.35	\$9.75
MJL21193	PNP	TO-3P	200W	250	16A	25/75	8A	ZT-2227	\$14.50	\$12.35	\$9.75
MJL21194	NPN	TO-3P	200W	250	16A	25/75	8A	ZT-2228	\$14.50	\$12.35	\$9.75
MJ15003	NPN	TO-3	250W	140	20A	25/150	5A	ZT-2230	\$11.95	\$10.45	\$7.95
MJ15004	PNP	TO-3	250W	140	20A	25/150	5A	ZT-2231	\$11.95	\$10.45	\$7.95
MJ2955	PNP	TO-3	115W	100	15A	5	10A	ZT-2235	\$3.45	\$3.05	\$2.35
MJE340	NPN	TO-126	20W	300	500mA	30/240	50mA	ZT-2255	\$2.95	\$2.60	\$2.00
MJE350	PNP	TO-126	20W	300	500mA	30/240	50mA	ZT-2260	\$2.95	\$2.60	\$2.00
MJE2955	PNP	TO-220	75W	70	10A	20/100	4A	ZT-2275	\$2.75	\$2.45	\$1.90
MJE3055	NPN	TO-220	75W	70	10A	20/70	4A	ZT-2280	\$2.75	\$2.45	\$1.90
MPSA06	NPN	TO-92	625mW	80	500mA	100	10mA	ZT-2286	\$0.50	\$0.45	\$0.35
MPSA13*	NPN	TO-92	625mW	30	500mA	5000	10mA	ZT-2287	\$0.50	\$0.45	\$0.35
NJL1302D	PNP	TO-264	200W	260	25A	75/150	15A	ZT-2237	\$16.95	\$14.95	\$11.45
NJL3281D	NPN	TO-264	200W	260	25A	75/150	15A	ZT-2236	\$16.95	\$14.95	\$11.45
TIP2955	PNP	SOT-93	90W	100	15A	20/70	4A	ZT-2270	\$3.45	\$3.05	\$2.35
TIP3055	NPN	SOT-93	90W	100	15A	20/70	4A	ZT-2278	\$3.45	\$3.05	\$2.35
TIP31	NPN	TO-220	40W	40	3A	25/50	1A	ZT-2285	\$1.85	\$1.65	\$1.25
TIP32	PNP	TO-220	40W	40	3A	25/50	1A	ZT-2290	\$1.85	\$1.65	\$1.25
TIP35C	NPN	TO-218	125W	100	25A	15/75	15A	ZT-2293	\$5.95	\$5.25	\$4.15
TIP36C	PNP	TO-218	125W	100	25A	15/75	15A	ZT-2294	\$5.95	\$5.25	\$4.15
TIP41C	NPN	TO-220	65W	100	6A	15/75	3A	ZT-2291	\$2.15	\$1.90	\$1.50
TIP42C	PNP	TO-220	65W	100	6A	15/75	3A	ZT-2289	\$2.15	\$1.90	\$1.50
TIP122	*NPN	TO-220	65W	100	5A	1000	3A	ZT-2292	\$2.15	\$1.90	\$1.50

TYPE	POLARITY	CASE	PD@25°C	VC	IC	HFE MIN/MAX	@ IC CONT.	CAT.	Qty 1+	Qty 10+	Qty 25+
2N2222A	NPN	TO-92	1.8W	75	800mA	100/300	150mA	ZT-2298	\$0.40	\$0.36	\$0.28
2N2907	PNP	TO-92	400mW	40	600mA	100/300	150mA	ZT-2322	\$1.15	\$1.00	\$0.80
2N3053	NPN	TO-39	1W	60	700mA	50/250	150mA	ZT-2299	\$1.15	\$1.00	\$0.80
2N3055	NPN	TO-3	115W	100	15A	20/70	4A	ZT-2300	\$2.95	\$2.60	\$2.00
2N3638	PNP	TO-92	300mW	25	500mA	30/130	30mA	ZT-2320	\$1.65	\$1.45	\$1.15
2N3773	NPN	TO-3	150W	160	16A	15/60	8A	ZT-2324	\$9.95	\$8.75	\$6.75
2N3904	NPN	TO-92	625mW	60	200mA	70	1mA	ZT-2326	\$0.75	\$0.68	\$0.53
2N3906	PNP	TO-92	625mW	40	200mA	80	1mA	ZT-2328	\$0.75	\$0.68	\$0.53

\* Denotes Darlington type. Data representative only. Please download the manufacturers data sheet if values are critical.





## TRANSISTORS MULTI-REPLACEMENT

### MULTI-REPLACEMENT COMMON TRANSISTORS

Two transistors which will replace a multitude of common hard to get devices. Both are TO-92 package.



#### PN100

NPN general purpose medium power amp and switch with continuous collector current up to 500mA. PN100 replaces PN2221, PN2222, PN2222A, PN3565, PN3568, PN3569, PN3643, PN5133, 2N2219A, 2N2222A, 2N3414, 2N3415, 2N3416, 2N3417, 2N3700, 2N3704, 2N3904, 2N4123, 2N4124, 2N4401, 2N5088 and 2N5210.

CAT.	Qty 1+	Qty 10+	Qty 50+
ZT-2283	\$0.40	\$0.36	\$0.28

TYPE	POLARITY	CASE	VCE	IC	HFE MIN/ MAX
PN100	NPN	TO-92	45V	500	80-600
PN200	PNP	TO-92	45V	500	80-600

#### PN200

PNP general purpose amplifier at collector currents to 500mA. PN200 replaces PN2907, PN2907A, PN3638, PN3638A, PN3640, PN3644, PN4121, PN4143, PN4248, PN4249, PN4250, PN4355, PN4916, PN4917, PN5910, 2N2905A, 2N3467, 2N3702, 2N3906, 2N4125, 2N4126, 2N4291, 2N4402, 2N4403, 2N5086, 2N5087, 2N5447

CAT.	Qty 1+	Qty 10+	Qty 50+
ZT-2284	\$0.40	\$0.36	\$0.28

## TRANSISTOR PACKS

### PROTOTYPE PACK

#### TRANSISTOR PACK

100 mixed BC series transistors.  
More of the common types.

- 15 x BC547
- 15 x BC548
- 20 x BC549
- 15 x BC557
- 15 x BC558
- 15 x BC559



CAT.	Qty 1+	Qty 10+	Qty 50+
ZT-2170	\$16.95	\$14.95	\$11.70

### SMD TRANSISTOR PACKS

#### BC817

Equivalent to BC547/8

- NPN
- SOT23-3
- 45V

CAT. ZT-2118

#### BC807

Equivalent to BC557/8

- PNP
- SOT23-3
- 45V

CAT. ZT-2121



TYPE	PACK	CAT.	Qty 1+	Qty 10+	Qty 50+
BC817	10	ZT-2118	\$1.95	\$1.75	\$1.35
BC807	10	ZT-2121	\$1.95	\$1.75	\$1.35

## TRANSISTOR CLAMPS

### TRANSISTOR CLAMPS

- To clamp TO-220 devices to a heatsink.



HH-8600/02



HH-8610



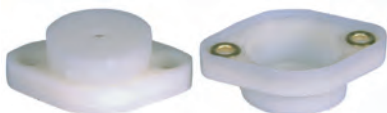
HH-8607

TYPE		PKT	CAT.	Qty 1+	Qty 10+	Qty 50+
Dual	TO-220	ea	HH-8610	\$1.45	\$1.30	\$1.15
Single	TO-220	10	HH-8600	\$8.95	\$7.95	\$6.95
Single	TO-220	100	HH-8602	\$24.95	\$22.35	\$19.70
Dual	TO-220	100	HH-8607	\$19.95	\$17.70	\$13.70

### FULL TO-3 INSULATING CAP

Ideal for insulating 'live' transistors or for simply keeping prying fingers away from potentially dangerous transistor cases.

- Fastens to the transistor
- Has a single ventilation hole to decrease chance of overheating.



CAT.	Qty 1+	Qty 10+	Qty 25+
ZM-9904	\$1.70	\$1.50	\$1.15

## INSULATION KITS

### SILICONE RUBBER TRANSISTOR INSULATORS

Silicone impregnated rubber washers. Stop using messy silicone grease. These washers are made from silicone rubber and are as effective as mica and grease.



PHYSICAL PROPERTIES	ALL
Colour	Grey HP-1150
Tensile Strength	40kg/cm2
Elongation	80%
Dielectric Breakdown Voltage	4000/0.3mm
Co-Efficient Of Thermal Conductance	2.4 x 10-3
Flammability Class	94V-0/0.3mm
Dimensional Stability	0.2% change/0.3mm

TYPE	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+
TO-3	20	HP-1150	\$12.50	\$10.70	\$9.50
TO-220	20	HP-1155	\$6.95	\$6.25	\$5.50
TO-220	100	HP-1156	\$17.95	\$15.95	\$14.35

Bushes to suit silicone impregnated rubber washers & mica washers  
TO220 - Pkt 100

CAT.	Qty 1+	Qty 10+	Qty 50+
HP-1166	\$9.95	\$8.75	\$6.75

### SILICONE RUBBER INSULATING KITS



HP-1172

HP-1174

TYPE	WASHERS	BUSHES	CAT.	Qty 1+	Qty 10+	Qty 25+
TO-3	4	8	HP-1172	\$3.75	\$3.30	\$2.60
TO-3P	4	4	HP-1174	\$3.75	\$3.30	\$2.60
TO-220	4	4	HP-1176	\$3.50	\$3.15	\$2.45

### TO-3 & TO-220 MICA INSULATING KITS

Mica washers and bushes



HP-1122

HP-1140

TYPE	PKT	CAT.	Qty 1+	Qty 10+	Qty 25+
TO-3	4	HP-1122	\$3.50	\$3.15	\$2.45
TO-220	4	HP-1142	\$1.95	\$1.75	\$1.35
TO-220	100	HP-1140	\$14.95	\$13.35	\$10.35

### ADHESIVE TRANSISTOR MOUNTING WASHER KITS

Adhesive silicone washers with good thermal conductivity. Makes installation of transistors a snap! Complete kit supplied including washer and bushes.



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
TO-220	HP-1160	\$9.95	\$8.95	\$7.95
TO-3	HP-1161	\$10.95	\$9.85	\$8.75
TO-3P	HP-1162	\$9.95	\$8.95	\$7.95

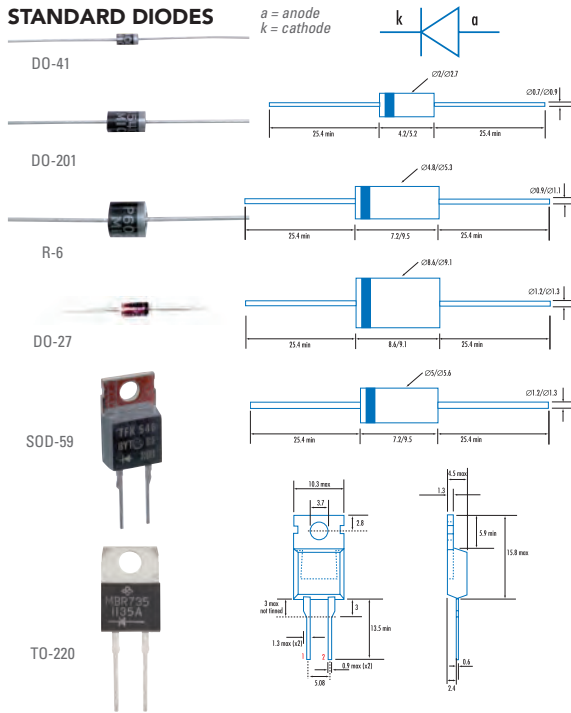
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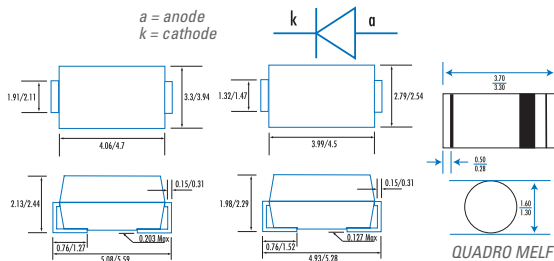


## GENERAL DIODES

### STANDARD DIODES



### SMD DIODES



### THROUGH HOLE DIODES - SSR = STANDARD SILICON RECTIFIER

TYPE	DESCRIPTION		CASE	PKT	CAT.	Qty 1+	Qty 10+	Qty 25+
1N4004	SSR	400V 1A	DO-41	4	ZR-1004	\$0.70	\$0.53	\$0.39
1N4004		400V 1A	DO-41	100	ZR-1005	\$7.95	\$5.90	\$4.30
1N4007	SSR	1000V 1A	DO-41	4	ZR-1007	\$0.80	\$0.60	\$0.44
1N4007		1000V 1A	DO-41	100	ZR-1008	\$12.95	\$9.50	\$6.95
1N4934	SSR	100V 1A	DO-41	10	ZR-1001	\$3.95	\$2.90	\$2.10
1N5404	SSR	400V 3A	DO-27	ea	ZR-1014	\$0.35	\$0.26	\$0.19
1N5404		400V 3A	DO-27	100	ZR-1015	\$11.95	\$8.75	\$6.50
1N5408	SSR	1000V 3A	DO-27	ea	ZR-1018	\$0.40	\$0.30	\$0.22
1N5408		1000V 3A	DO-27	100	ZR-1017	\$14.95	\$10.95	\$7.95
1N5711	Schottky	70V 15mA	DO-35	ea	ZR-1027	\$0.80	\$0.60	\$0.44
1N5819	Schottky	40V 1A	DO-41	ea	ZR-1020	\$0.80	\$0.60	\$0.44
1N5822	Schottky	40V 3A	DO-201	ea	ZR-1048	\$1.15	\$0.80	\$0.65
1N5822	Schottky	40V 3A	DO-27	10	ZR-1023	\$6.95	\$5.35	\$3.75
1N914/1N4148	Signal	100V 150mA	DO-27	5	ZR-1100	\$0.60	\$0.45	\$0.33
1N914/1N4148		100V 150mA	DO-27	100	ZR-1105	\$5.95	\$4.45	\$3.15
6A1/P600B	SSR	100V 6A	R-6	10	ZR-1041	\$13.95	\$10.50	\$7.75
6A4/P600G	SSR	400V 6A	R-6	10	ZR-1044	\$13.95	\$10.50	\$7.75
6A10/P600M	SSR	1000V 6A	R-6	ea	ZR-1024	\$2.25	\$1.65	\$1.20
BAT46/48	Schottky	100V 150mA	DO-27	ea	ZR-1141	\$1.50	\$1.10	\$0.80
BY229	Fast	600V 8A	SOD-59	ea	ZR-1028	\$6.95	\$5.35	\$3.75
FR302	Fast	100V 3A	DO-201	10	ZR-1050	\$3.45	\$2.55	\$1.95
FR307	Fast	1000V 3A	DO-201	10	ZR-1052	\$3.45	\$2.55	\$1.95
FR607	Fast	1000V 6A	R-6	10	ZR-1054	\$16.95	\$12.75	\$9.25
MBR20100CT	Dbi Schottky	100V 20A	TO-220	ea	ZR-1039	\$2.50	\$2.20	\$1.75
MBR735	Schottky	35V 7A	TO-220	ea	ZR-1029	\$1.75	\$1.30	\$0.95
SF37	Super Fast	600V 3A	DO-27	10	ZR-1090	\$7.95	\$5.90	\$4.30
UF4003	Ultrafast	200V 1A	DO-41	ea	ZR-1034	\$1.15	\$0.80	\$0.65
UF4004	Ultrafast	400V 1A	DO-41	ea	ZR-1036	\$1.50	\$1.10	\$0.80
UF4007	Ultrafast	1000V 1A	DO-41	ea	ZR-1038	\$2.00	\$1.45	\$1.05

### SURFACE MOUNT DIODES

• Sold as a pack of 10



TYPE	DESCRIPTION	CASE	CAT.	Qty 1+	Qty 10+	Qty 25+
1N917/1N4148	100V 150mA	Quadro Melf	ZR-1103	\$6.95	\$5.35	\$3.75
SM4004A	400V	1A D0-214AC	ZR-1003	\$5.95	\$4.45	\$3.15
SM4007A	1000V	1A D0-214AC	ZR-1009	\$2.95		
SM4934A	100V	1A D0-214AC	ZR-1070	\$6.95	\$5.35	\$3.75
SM5819A Schottky	40V	1A D0-214AC	ZR-1021	\$6.95	\$5.35	\$3.75
SM5822B Schottky	40V	3A D0-214AA	ZR-1025	\$6.95	\$5.35	\$3.75

## ZENER DIODES

### 1 WATT ZENER DIODES\*

<b>ABSOLUTE MAXIMUM RATINGS</b>	
Power Dissipation	1W
Derate Above 50°C	6.67mW/°C
Storage Temperature Range	-65°C to +200°C
Operating Junction Temperature	+200°C
Thermal Resistance Junction To Lead	53.5°C/W
Thermal Resistance Junction To Ambient	100°C/W
Lead Temperature (1/16" From Case For 10 Sec)	230°C
Surge Power*	10W
Case Size	DO-41

\*Non-recurrent square wave PW=8.3ms, TA=55°C  
Note 1: Ratings are based on max junction temperature of 200°C  
Note 2: These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

$a = \text{anode}$   
 $k = \text{cathode}$

Look for our Tech Talk on page 114 for how Zener Diodes work.

TYPE	VOLTAGE	CAT.	Qty 1+	Qty 10+	Qty 50+
1N4728	3V3	ZR-1398	\$0.65	\$0.59	\$0.46
1N4729	3V6	ZR-1399	\$0.65	\$0.59	\$0.46
1N4730	3V9	ZR-1400	\$0.65	\$0.59	\$0.46
1N4731	4V3	ZR-1401	\$0.65	\$0.59	\$0.46
1N4732	4V7	ZR-1402	\$0.65	\$0.59	\$0.46

### 5 WATT ZENER DIODES

1N53XXB Series Silicon Zener Diodes are a high quality voltage regulator for use in industrial, commercial, and other applications.

<b>ABSOLUTE MAXIMUM RATINGS</b>	
Power Dissipation (@TL=75°C)	5 Watts
Operating and Storage Temperature	-65°C to +200°C
Tolerance "B Suffix"	+5%

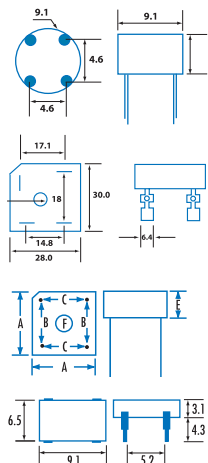
$a = \text{anode}$   
 $k = \text{cathode}$

TYPE	VOLTAGE	CAT.	Qty 1+	Qty 10+	Qty 50+
1N4733	5V1	ZR-1403	\$0.65	\$0.59	\$0.46
1N4734	5V6	ZR-1404	\$0.65	\$0.59	\$0.46
1N4735	6V2	ZR-1405	\$0.65	\$0.59	\$0.46
1N4736	6V8	ZR-1406	\$0.65	\$0.59	\$0.46
1N4737	7V5	ZR-1407	\$0.65	\$0.59	\$0.46
1N4738	8V2	ZR-1408	\$0.65	\$0.59	\$0.46
1N4739	9V1	ZR-1409	\$0.65	\$0.59	\$0.46
1N4740	10V	ZR-1410	\$0.65	\$0.59	\$0.46
1N4741	11V	ZR-1411	\$0.65	\$0.59	\$0.46
1N4742	12V	ZR-1412	\$0.65	\$0.59	\$0.46
1N4743	13V	ZR-1413	\$0.65	\$0.59	\$0.46
1N4744	15V	ZR-1415	\$0.65	\$0.59	\$0.46
1N4745	16V	ZR-1416	\$0.65	\$0.59	\$0.46
1N4746	18V	ZR-1418	\$0.65	\$0.59	\$0.46
1N4747	20V	ZR-1420	\$0.65	\$0.59	\$0.46
1N4748	22V	ZR-1422	\$0.65	\$0.59	\$0.46
1N4749	24V	ZR-1424	\$0.65	\$0.59	\$0.46
1N4750	27V	ZR-1427	\$0.65	\$0.59	\$0.46
1N4751	30V	ZR-1430	\$0.65	\$0.59	\$0.46
1N4752	33V	ZR-1433	\$0.65	\$0.59	\$0.46
1N4753	36V	ZR-1436	\$0.65	\$0.59	\$0.46
1N4754	39V	ZR-1439	\$0.65	\$0.59	\$0.46
1N4761	75V	ZR-1475	\$0.95	\$0.85	\$0.65

TYPE	VOLTAGE	CAT.	Qty 1+	Qty 10+	Qty 50+
1N5352B	15V	ZR-1450	\$1.75	\$1.55	\$1.20
1N5349B	12V	ZR-1440	\$1.75	\$1.55	\$1.20
1N5374B	75V	ZR-1480	\$1.75	\$1.55	\$1.20



## BRIDGE RECTIFIERS



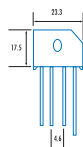
**ZR-1314 ZR-1320**  
 A=15.3mm  
 A=19.6mm  
 B=8.8mm  
 B=13.2mm  
 C=9.1mm  
 C=13.2mm  
 E=6.4mm  
 E=7.5mm  
 F=ø4mm F=ø6mm

ZR-1304

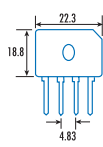
ZR-1324

ZR-1320

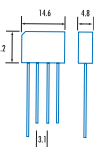
ZR-1308



ZR-1360



ZR-1362



ZR-1350

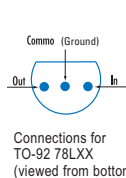
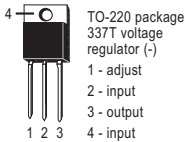
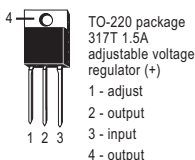
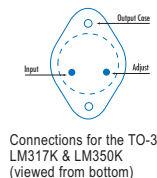
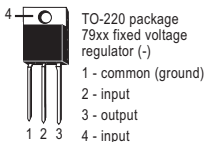
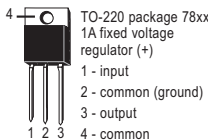
### BRIDGE RECTIFIERS

TYPE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
DB104	400V	1A	ZR-1308	\$1.25	\$0.90	\$0.65
W04	400V	1.2A	ZR-1304	\$0.85	\$0.64	\$0.47
BR64	400V	6A	ZR-1314	\$2.50	\$1.85	\$1.35
BR106	600V	10A	ZR-1320	\$2.85	\$2.10	\$1.50
MB354	400V	35A	ZR-1324	\$5.50	\$4.10	\$3.00

### INLINE BRIDGE RECTIFIERS

TYPE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
RS206	800V	2A	ZR-1350	\$2.25	\$1.65	\$1.20
KBU604	400V	6A	ZR-1360	\$3.35	\$2.45	\$1.80
GBU806	800V	8A	ZR-1362	\$3.95	\$2.90	\$2.10

## VOLTAGE REGULATORS



### STANDARD VOLTAGE REGULATORS

TYPE	VOUT	IOUT	CASE	CAT.	Qty 1+	Qty 10+	Qty 25+
7805/LM340T5	+5V	1A	TO-220	ZV-1505	\$1.85	\$1.65	\$1.25
7806/LM340T6	+6V	1A	TO-220	ZV-1506	\$1.85	\$1.65	\$1.25
7808/LM340T8	+8V	1A	TO-220	ZV-1508	\$1.85	\$1.65	\$1.25
7809/LM340T9	+9V	1A	TO-220	ZV-1509	\$1.85	\$1.65	\$1.25
7812/LM340T12	+12V	1A	TO-220	ZV-1512	\$1.85	\$1.65	\$1.25
7815/LM340T15	+15V	1A	TO-220	ZV-1515	\$1.85	\$1.65	\$1.25
7824/LM340T24	+24V	1A	TO-220	ZV-1524	\$1.85	\$1.65	\$1.25
78L05	+5V	100mA	TO-92	ZV-1539	\$1.50	\$1.35	\$1.05
78L12	+12V	100mA	TO-92	ZV-1542	\$1.50	\$1.35	\$1.05
7905/LM320T5	-5V	1A	TO-220	ZV-1525	\$1.85	\$1.65	\$1.25
7909/LM320T9	-9V	1A	TO-220	ZV-1530	\$1.85	\$1.65	\$1.25
7912/LM320T12	-12V	1A	TO-220	ZV-1532	\$1.85	\$1.65	\$1.25
7915/LM320T15	-15V	1A	TO-220	ZV-1535	\$1.85	\$1.65	\$1.25
LM317K	+1.2 to +37V	1.5A	TO-3	ZV-1610	\$6.95	\$6.25	\$4.75
LM317T	+1.2 to +37V	1.5A	TO-220	ZV-1615	\$2.95	\$2.60	\$2.00
LM337T	-1.2 to -37V	1.5A	TO-220	ZV-1620	\$4.25	\$3.75	\$2.95
LM350K	+1.2 to +33V	3A	TO-3	ZV-1635	\$19.95	\$17.95	\$13.95
LM723CN	+2.0 to +37V	150mA	DIP14	ZV-1676	\$2.25	\$2.00	\$1.55
MC78T12	+12V	3A	TO-220	ZV-1634	\$4.95	\$4.45	\$3.45

### SWITCHING VOLTAGE REGULATORS

TYPE		VOUT	IOUT	CASE	CAT.	Qty 1+	Qty 10+	Qty 25+
LM2576T-ADJ	Stepdown	+1.23 to +37V	3A	TO-220	ZV-1640	\$5.95	\$5.35	\$4.15
LM2577T-12	Stepup	+12V	3A	TO-220	ZV-1642	\$11.95	\$10.45	\$7.95
LM2577-ADJ <b>NEW</b>	Stepup	+3.5 to +50V	3A	TO-220	ZV-1656	\$4.95	\$4.45	\$3.45
LM2678T-5.0	Stepdown	+5V	5A	TO-220	ZV-1636	\$11.95	\$10.45	\$7.95
LM2678T-12	Stepdown	+12V	5A	TO-220	ZV-1637	\$11.95	\$10.45	\$7.95
TL499SCP	Controller	+2.9 to +30V	100mA	DIP8	ZV-1644	\$3.95	\$3.55	\$2.75

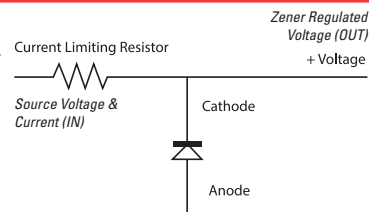
### LOW DROPOUT REGULATORS

TYPE	DESCRIPTION	CASE	VIN (TYP)	VOUT	IOUT (MAX)	VDROP (VOUT-VIN)	CAT.	Qty 1+	Qty 10+	Qty 25+
LM-3940	Fixed voltage	TO-220	4.5 to 5.5V	+3.3V	1.0A	500mV at 1A	ZV-1565	\$4.25	\$3.80	\$2.95
LM2936-3.3	Ultra low quiescent current	TO-92	4.0 to 26V	+3.3V	50mA	200mV at 50mA	ZV-1650	\$4.95	\$4.45	\$3.45
LP2951ACN	Micropower adjustable voltage	DIP8	2.0 to 30V	+1.24 to +29V	100mA	380mV at 100mA	ZV-1646	\$2.50	\$2.20	\$1.75
LM2940CT-5.0	Fixed voltage	TO-220	6.25 to 26V	+5V	1.0A	500mV at 1A	ZV-1560	\$8.65	\$7.50	\$5.75
LM2940CT-12	Fixed voltage	TO-220	13.6 to 26V	+12V	1.0A	500mV at 1A	ZV-1562	\$8.65	\$7.50	\$5.75
LM2936-5.0	Ultra low quiescent current	TO-92	5.5 to 26V	+5V	50mA	200mV at 50mA	ZV-1652	\$4.95	\$4.45	\$3.45
LM1085T-12	Fixed voltage, high current	TO-220	13.5 to 25V	+12V	3.0A	1.3V at 3A	ZV-1564	\$8.95	\$7.95	\$6.25
LP2950ACZ-5.0	Micropower fixed voltage	TO-92	6.0 to 30V	+5V	100mA	380mV at 100mA	ZV-1645	\$2.65	\$2.35	\$1.85
MCP1703-5002E/CB	Ultra low quiescent current	SOT-23	5.33 to 16V	+5V	250mA	330mV at 250mA	ZV-1545	\$23.95	\$21.35	\$16.70

## Tech Talk: What Is A Zener Diode And How Does It Work?

A Zener diode works like a normal diode in the FORWARD direction, but when voltage is applied in the REVERSE direction it does something really useful. At a specified reverse voltage it starts to conduct. In other words, if you apply, say 12V (for a 12V Zener) across the diode it will start to conduct current. See diagram: When the Zener starts to draw current, this has the effect of regulating the positive (+) voltage. Note: As the Zener draws current, this will turn into heat. The Zener therefore has a wattage rating (as well as its Zener voltage rating) this may not be exceeded. Jaycar carries a range of Zener diodes from 3.3V to 75V.

Fig 1. As positive (+) voltage climbs up to 12 volts the 12V Zener starts to conduct, drawing current







## ▼ THERMISTORS

### NEGATIVE TEMPERATURE COEFFICIENT THERMISTORS

These devices are made of a special ceramic material which changes resistance value rapidly with temperature increase. They are commonly used to check thermal runaway in bipolar transistor amplifiers etc, but really have dozens of other uses. They are rugged and very reliable.

- Resistance at 25°C ±10%
- Dissipation (MAX) 500mW
- Temperature Range -20°C ~ +125°
- Case 5mm diameter
- Thermal dissipation constant: 6mW/°C
- Radial type, dipped epoxy
- Type-NTC Ceramic material with tinned copper lead



RESIST. (Ω)	MAX CURRENT (mA)		CAT.	Qty 1+	Qty 25+	Qty 100+
15	250	Ceramic	RN-3430	\$1.75	\$1.20	\$1.05
100	200	Ceramic	RN-3432	\$1.75	\$1.20	\$1.05
500	100	Ceramic	RN-3434	\$1.75	\$1.20	\$1.05
1k	80	Ceramic	RN-3436	\$1.75	\$1.20	\$1.05
4.7k	45	Ceramic	RN-3438	\$1.75	\$1.20	\$1.05
10k	30	Ceramic	RN-3440	\$1.75	\$1.20	\$1.05
47k	20	Ceramic	RN-3442	\$1.75	\$1.20	\$1.05
100k	15	Ceramic	RN-3444	\$1.75	\$1.20	\$1.05

## ▼ SCRS / TRIACS / DIACS

### SCRS

SILICON CONTROLLED RECTIFIERS - Reverse blocking thyristors glassivated PNP devices designed for high volume consumer applications such as temperature, light and speed control, process and remote control and warning systems where reliability of operation is important.

- Glassivated surface for reliability and uniformity
- Power rated at economical prices
- Sensitive gate triggering
- Practical level triggering and holding characteristics
- Flat, rugged, thermopad construction for low thermal resistance, high heat dissipation and durability



TYPE	VMAX	IE(A)	VF(V)	IG(μA)	VG(V)	HOLD IN (MA)	CAT.
BT169D	400	0.8	1.2	50	0.5	2	ZX-7010
C106D1	400	4	2.2	200	0.8	3	ZX-7006
C122E/ MCR8M/ BT151	500	8	1.8	25mA	1	30	ZX-7012

	VOLTAGE	CAT.	Qty 1+	Qty 10+	Qty 25+
BT169D	400V	ZX-7010	\$2.95	\$2.60	\$2.00
C106D1	400V	ZX-7006	\$2.95	\$2.60	\$2.00
C122E/ MCR8M/ BT151	500V	ZX-7012	\$5.50	\$4.90	\$3.75

### TRIACS

TYPE	VMAX	IE(A)	VF(V)	IG(μA)	VG(V)	HOLD IN (MA)	CAT.
SC141D	400	6	2	50	2.5	50	ZX-7141
SC151D	400	15	1.6	50	2	50	ZX-7145
TAG225	400	5	2	25	2.5	25	ZX-7147
BT137X	600	8	1.65	25	1.5	<20	ZX-7149*

\*Note: ZX-7149 is isotab - mounting tab is dielectrically isolated.

	VOLTAGE	CAT.	Qty 1+	Qty 10+	Qty 25+
SC141D	400V	ZX-7141	\$2.95	\$2.60	\$2.00
SC151D	400V	ZX-7145	\$2.95	\$2.60	\$2.00
TAG225	400V	ZX-7147	\$5.50	\$4.90	\$3.75
BT137X	600V	ZX-7149	\$5.50	\$4.90	\$3.75

### DIAC

- Will trigger most devices above with a suitable timing circuit (DO-41)

TYPE	VOC	IFMAX	ISW	VSW	CAT.	Qty 1+	Qty 10+	Qty 25+
ST2	3.5V	5mA	27	35V	ZX-7192	\$1.85	\$1.65	\$1.25



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!

### HIGH TEMPERATURE GLASS THERMISTOR 100K

This high temperature NTC thermistor is suitable for operation up to 250 degrees, and is compatible with the hot-end thermistors used in many 3D printers (including TL4100 and TL4076).

- Sealed glass body with small bead for fast response
- 30mm leads

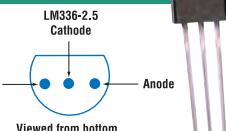


	CAT.	Qty 1+	Qty 25+	Qty 100+
100kΩ @ 25°C	RN-3446	\$4.95	\$3.45	\$2.95

## ▼ VOLTAGE REFERENCE DIODES

### VOLTAGE REFERENCE DIODE

Provides a stable 2.5V reference point for circuitry and can be used to make portable meters, regulators or general purpose analog circuitry.



TYPE	VREF	IF (MIN)	CASE	CAT.	Qty 1+	Qty 10+	Qty 25+
LM336-2.5	2.5V	10mA	TO-92	ZV-1624	\$3.95	\$3.50	\$2.75

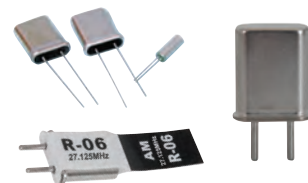
## ▼ CRYSTALS

### CRYSTALS

Freq Tolerance: ±30Hz per 1MHz.  
Operating Temp: -20 to +70°C.  
Load Capac: 30pF typ.

### RC CRYSTAL TX/RX

- Used in remote control circuits
- Supplied as a pair



	CAT.	Qty 1+	Qty 10+	Qty 25+
27.095MHz	RQ-5275	\$9.95	\$8.75	\$7.75
27.125MHz	RQ-5276	\$9.95	\$8.75	\$7.75
27.145MHz	RQ-5277	\$9.95	\$8.75	\$7.75
27.175MHz	RQ-5278	\$9.95	\$8.75	\$7.75
27.195MHz	RQ-5279	\$9.95	\$8.75	\$7.75

FREQ. (MHZ)	W X D X H (MM)	CASE	MAX ESR	CAT.	Qty 1+	Qty 10+	Qty 25+
2.00	11.05 x 4.65 x 13.46	HC49U	500Ω	RQ-5268	\$4.50	\$3.95	\$3.60
3.2768	11.05 x 4.65 x 13.45	HC49U	90Ω	RQ-5271	\$4.50	\$3.95	\$3.60
3.5795	11.05 x 4.65 x 13.46	HC49U	90Ω	RQ-5272	\$4.50	\$3.95	\$3.60
4.000	11.05 x 4.65 x 13.46	HC49U	70Ω	RQ-5274	\$4.50	\$3.95	\$3.60
4.433619	11.05 x 4.65 x 13.46	HC49U	70Ω	RQ-5284	\$4.50	\$3.95	\$3.60
6.00	11.05 x 4.65 x 13.46	HC49U	60Ω	RQ-5285	\$4.50	\$3.95	\$3.60
8.00	11.05 x 4.65 x 13.46	HC49U	30Ω	RQ-5287	\$4.50	\$3.95	\$3.60
10.00 (P)	11.05 x 4.65 x 13.46	HC49U	30Ω	RQ-5289	\$4.50	\$3.95	\$3.60
12.00	11.05 x 4.65 x 13.46	HC49U	30Ω	RQ-5293	\$4.50	\$3.95	\$3.60
16.00 NEW	11.05 x 4.65 x 13.46	HC49U	25Ω	RQ-5296	\$4.50	\$3.95	\$3.60
20.00	11.05 x 4.65 x 13.46	HC49U	25Ω	RQ-5299	\$4.50	\$3.95	\$3.60
32.768kHz	3.1 x 3.1 x 8	DT38	35kΩ	RQ-5297	\$4.50	\$3.95	\$3.60
38kHz Mini	3 x 8.5		40Ω	RQ-5298	\$4.50	\$3.95	\$3.60

## Tech Talk: What Does "Embedded System" Mean?

An embedded system is a dedicated circuit, generally centred around a microprocessor (or micro controller) which has a software program stored in dedicated on-board memory or in the memory of the microprocessor itself that has a SPECIFIC computational purpose. A calculator, is, for example an embedded system. It is specifically made to perform a particular task. A mobile phone is another example of an embedded system. A controller for a washing machine or a microwave oven is an example of an embedded system also. In other words, the application is specifically embedded in the system architecture. Typically a personal computer has a "general purpose" application. Both personal computers and embedded systems are programmed by high level languages, but nowadays the programming language in a PC is less obvious as the PC generally powers up to an application's menu automatically. The embedded system, on the other hand requires you to program the device directly through a programming language like 'C' etc. Interestingly, Smartphone which can still be regarded as an embedded system are looking more and more like PCs every day. Maybe the definitions will need to be redefined in future.



## ▼ MOSFETS, FETS, UJTS

### MOSFETS, FETS, UJTS

- Major brands

#### UJTS

TYPE	VOLTAGE	DESCRIPTION	PACK	CAT.	Qty 1+	Qty 10+	Qty 25+
2N2646	30V	UJT PN 300mW	TO-5	ZT-2297	\$9.95	\$8.95	\$6.95
2N6027	0V	UJT Programmable 30mW	TO-92	ZT-2397	\$1.95	\$1.75	\$1.35

#### FETS/JFETS

TYPE	VOLTAGE	CURRENT	DESCRIPTION	PACK	CAT.	Qty 1+	Qty 10+	Qty 25+
2N5484	25V	10mA	JFET N-Ch VHF/UHF Amp	TO-92	ZT-2375	\$2.95	\$2.65	\$2.05
2N7000	60V	200mA	FET D-MOS N-Ch Relay Driver	TO-92	ZT-2400	\$0.75	\$0.68	\$0.53
MPF102	25V	10mA	JFET N-Ch VHF Amp	TO-92	ZT-2262	\$2.45	\$2.21	\$1.95
MPF106/2N5485	25V	10mA	JFET N-Ch VHF/UHF Amp	TO-92	ZT-2266	\$2.45	\$2.20	\$1.70
VN10KM	60V	300mA	FET N-Ch	TO-92	ZT-2452	\$4.95	\$4.45	\$3.45

#### MOSFETS

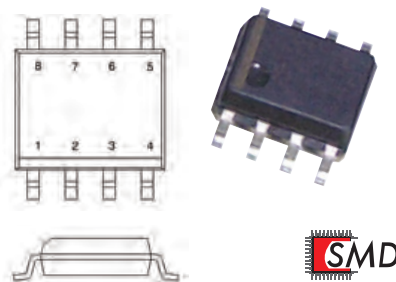
TYPE	VOLTAGE	CURRENT	DESCRIPTION	PACK	CAT.	Qty 1+	Qty 10+	Qty 25+
BUZ71	50V	14A	MOSFET N-Ch Power	TO-220	ZT-2225	\$4.95	\$4.45	\$3.45
IRF9540N	100V	23A	MOSFET P-Ch Power	TO-220	ZT-2467	\$5.95	\$5.25	\$4.15
IRF1405N	55V	169A	MOSFET N-Ch Automotive	TO-220	ZT-2468	\$5.95	\$5.25	\$4.15
IRF540N	100V	33A	MOSFET N-Ch Power	TO-220	ZT-2466	\$5.95	\$5.25	\$4.15
ST16NE06/ STP60NF06	60V	16A	MOSFET N-Ch Power	TO-220	ZT-2277	\$2.95	\$2.60	\$2.00
BUK-456-60	60V	60A	FET N-Ch Power	TO-220	ZT-2450	\$9.95	\$8.75	\$6.75
SUP53P06-20	60V	53A	MOSFET P-Ch	TO-220	ZT-2464	\$5.95	\$5.25	\$4.15



See our range of Heatsink on page 136

### DUAL N-CHANNEL 30V MOSFET - SI4944DY

This handy dual N-channel MOSFET can be used in many projects such as DC-DC conversion and switching circuits. They have extremely low on-resistance ( $r_{DS(on)}$  0.016 $\Omega$  VGS = 4.5V) and fast switching/low capacitance. They are very useful as analog switches as well as the traditional uses for MOSFETs eg, relay driving, LED driving, etc.



TYPE	CASE	CAT.	Qty 1+	Qty 10+	Qty 25+
SI4944DY	SOIC8	ZK-8821	\$5.50	\$4.90	\$3.75

## ▼ TRANSDUCERS

### ULTRASONIC TRANSDUCER

- Compact and lightweight
- High sound pressure level
- Low power consumption
- High sensitivity, reliability & stability
- Transmitter & receiver in one unit

#### Application:

- Parking sensors
- Proximity sensor
- Motion detector
- Automatic doors
- Intruder alarm
- Water level meter



SPECIFICATIONS	AU-5550		
Frequency	40kHz	Input Voltage	140V
Transmitting Sound Pressure	>105dB	Operating Temperature	-40°C to +85°C
Receiving Sensitivity	>-74dB		

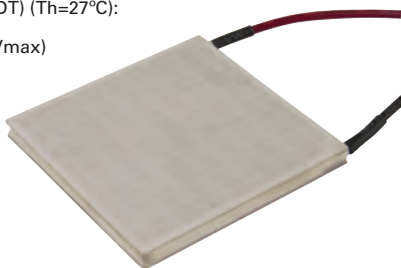
	CAT.	Qty 1+	Qty 5+	Qty 10+
	AU-5550	\$6.95	\$6.25	\$5.50

## ▼ PELTIER MODULES

### THERMOELECTRIC (PELTIER) MODULES

These are a solid-state devices which operate as a heat pump to transfer heat utilising the Peltier effect. Suitable for cooling or heating applications up to 100°C.

- Measures: 40 x 40 mm with lead wires
- Temperature differential (DT) (Th=27°C): >=68°C
- Optimum input voltage (Vmax) (Th=27°C): 15V



SPECIFICATIONS	ZP-9100	ZP-9102	ZP-9104
Optimum Input Current (Imax) (Th=27°C)	4A	6A	8A
Maximum Cooling Power (Qmax)	33.4W	51.4W	68.09W

COOLING POWER	CAT.	Qty 1+	Qty 10+	Qty 25+
33.4W	ZP-9100	\$21.95	\$19.45	\$17.45
51.4W	ZP-9102	\$24.95	\$22.45	\$19.95
68.09W	ZP-9104	\$27.95	\$24.95	\$21.95

## ▼ VALVE SOCKETS

### VALVE SOCKETS

#### 9 PIN:

This unit is moulded from high grade thermosetting resin. The pins are adequately plated and have deep solder terminals, sufficient for several hard wiring points per pin. Sturdy flange mount is meant for fitting above the chassis.

#### 8 PIN:

Made from similar materials to above, but with moulded key. Can be mounted above or below the chassis.



	CAT.	Qty 1+	Qty 10+	Qty 50+
9 Pin	PS-2082	\$6.95	\$6.25	\$5.50
8 Pin	PS-2080	\$7.95	\$7.10	\$6.25

## Tech Talk: Capacitor Types

These offer low cost and high capacitance in a small physical size. Normally there are two types, the 'High Stability Temperature Compensating' type and the 'Bypass and Coupling' type. The former for use in resonant circuit and filter applications, with a value largely independent of voltage and frequency. The latter is for use in less critical applications, as they are less stable and have non-linear temperature characteristics and are somewhat voltage dependent.

**POLYESTER:** These type offer good stability, a large range of values at low cost, and are the most widely used capacitor for general purpose.

**POLYCARBONATE:** These have a low temperature coefficient, low dielectric loss at high frequency and excellent temperature stability characteristics.

**POLYSTYRENE:** These offer tight tolerance and are highly stable; making them suitable for very stable tuned circuits and oscillators.

**POLYPROPYLENE:** This type has a very low dielectric loss and are particularly suitable in audio circuits and sample-and-hold circuits.

**MYLAR:** This is the Du Pont trademark for polyester. They usually have an aluminium film deposit on the dielectric and are called "metallised polyester".

#### CAPACITOR QUICK REFERENCE CHART

USE	CAPACITOR TYPE	CAT.NO	PAGE
RF	Ceramic	RC-5XXX	118
AUDIO	MKT	RM-7XXX	117
SMPS	Low ESR	RE-63XX	120
PSU	Electrolytic	RE-60XX	119
CROSSOVER	Poly/Electrolytic	RY-69XX	119
MOTOR	Motor Start	RU-66XX	119



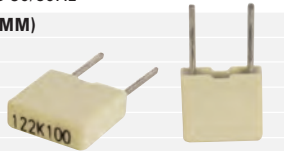
## CAPACITORS

### 100VDC MKT MINIATURE POLYESTER

- Rated voltage: 100VDC working, 40VAC 50/60Hz

#### CAPACITANCE WIDTH DEPTH HEIGHT (MM)

0.001 - 0.08µF	7.5	2.5	6.5
0.10 - 0.22µF	7.5	3.2	8
0.27 - 0.56µF	7.5	5	8
0.68µF	7.5	6	9.6
1.5µF	26	7	16



VALUE (µF)	(nF)	PITCH (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
0.0010	1.0	5	RM-7010	\$0.35	\$0.24	\$0.21
0.0012	1.2	5	RM-7012	\$0.35	\$0.24	\$0.21
0.0015	1.5	5	RM-7015	\$0.35	\$0.24	\$0.21
0.0022	2.2	5	RM-7022	\$0.35	\$0.24	\$0.21
0.0027	2.7	5	RM-7027	\$0.35	\$0.24	\$0.21
0.0033	3.3	5	RM-7033	\$0.35	\$0.24	\$0.21
0.0039	3.9	5	RM-7039	\$0.35	\$0.24	\$0.21
0.0047	4.7	5	RM-7047	\$0.35	\$0.24	\$0.21
0.0068	6.8	5	RM-7055	\$0.35	\$0.24	\$0.21
0.010	10	5	RM-7065	\$0.35	\$0.24	\$0.21
0.012	12	5	RM-7070	\$0.35	\$0.24	\$0.21
0.015	15	5	RM-7075	\$0.35	\$0.24	\$0.21
0.018	18	5	RM-7080	\$0.35	\$0.24	\$0.21
0.022	22	5	RM-7085	\$0.35	\$0.24	\$0.21
0.033	33	5	RM-7095	\$0.35	\$0.24	\$0.21
0.039	39	5	RM-7100	\$0.35	\$0.24	\$0.21
0.047	47	5	RM-7105	\$0.35	\$0.24	\$0.21
0.056	56	5	RM-7110	\$0.35	\$0.24	\$0.21
0.068	68	5	RM-7115	\$0.35	\$0.24	\$0.21
0.082	82	5	RM-7120	\$0.40	\$0.27	\$0.24
0.10	100	5	RM-7125	\$0.40	\$0.27	\$0.24
0.12	120	5	RM-7130	\$0.40	\$0.27	\$0.24
0.15	150	5	RM-7135	\$0.45	\$0.30	\$0.25
0.18	180	5	RM-7140	\$0.45	\$0.30	\$0.25
0.22	220	5	RM-7145	\$0.45	\$0.30	\$0.25
0.27	270	5	RM-7150	\$0.65	\$0.45	\$0.37
0.33	330	5	RM-7153	\$0.65	\$0.45	\$0.37
0.39	390	5	RM-7159	\$0.65	\$0.45	\$0.37
0.47	470	5	RM-7165	\$0.65	\$0.45	\$0.37
0.56	560	5	RM-7166	\$0.85	\$0.57	\$0.50
0.68	680	5	RM-7168	\$0.85	\$0.57	\$0.50
1.00	1000	5	RM-7170	\$0.95	\$0.65	\$0.55
1.50	1500	23	RM-7172	\$1.25	\$0.85	\$0.75

### 250VDC METALLISED POLYPROPYLENE

- Ideal for speaker crossovers
- Axial

250VDC  
1.5µF 50V

HIGH  
QUALITY

Metallised polypropylene dielectric offers stable capacitance over a wide temperature range. This, and the relatively high capacitance for size makes them ideal for high quality loudspeaker crossover networks. Naturally, they are also suitable for other applications where a stable, non polarised capacitive component is required.

VALUE (µF)	W X D X H (mm)	CAT.	Qty 1+	Qty 5+	Qty 10+
1.0	25 x 16 x 8	RY-6950	\$3.95	\$2.75	\$2.30
1.5	29 x 17 x 10	RY-6951	\$4.95	\$3.95	\$3.45
2.2	32 x 19 x 10	RY-6952	\$5.65	\$4.60	\$4.15
3.3	32 x 22 x 13	RY-6953	\$7.95	\$6.25	\$5.50
4.7	32 x 22 x 15	RY-6954	\$12.50	\$8.75	\$7.75
5.6	46 x 20 x 12	RY-6955	\$13.50	\$9.75	\$8.75
6.8	46 x 22 x 14	RY-6956	\$14.50	\$11.35	\$10.35
8.2	46 x 23 x 16	RY-6957	\$17.95	\$13.35	\$11.70
10.0	56 x 29 x 21	RY-6958	\$18.95	\$14.95	\$13.35

### 250VAC - METALLISED POLYPROPYLENE - X2 STYLE



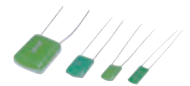
Voltage rating: 275/250VAC  
Capacitance tolerance: ±10% std ±5%  
Operating temperature: -40°C to 85°C



VALUE (µF)	(nF)	PITCH (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
0.010	10	10	RG-5230	\$0.95	\$0.65	\$0.55
0.022	22	10	RG-5232	\$0.95	\$0.65	\$0.55
0.047	47	15	RG-5234	\$0.95	\$0.65	\$0.55
0.10	100	15	RG-5236	\$1.25	\$0.85	\$0.75
0.22	220	22.5	RG-5238	\$1.35	\$0.90	\$0.80
0.47	470	22.5	RG-5240	\$3.75	\$2.60	\$2.20
1.0	1000	27.5	RG-5248	\$4.25	\$2.90	\$2.45

### GREENCAPS POLYESTER OR MYLAR

- Supplied loose
- Operating temperature: -40°C to +85°C



#### 100VDC

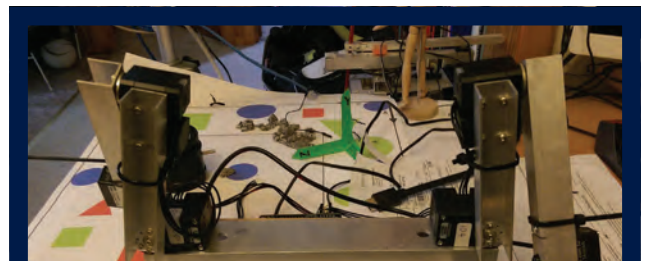
VALUE (µF)	(nF)	PITCH (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
0.0010	1.0	4	RG-5010	\$0.30	\$0.21	\$0.18
0.0012	1.2	4	RG-5012	\$0.30	\$0.21	\$0.18
0.0015	1.5	4	RG-5015	\$0.30	\$0.21	\$0.18
0.0018	1.8	4	RG-5018	\$0.30	\$0.21	\$0.18
0.0022	2.2	4	RG-5022	\$0.30	\$0.21	\$0.18
0.0027	2.7	4	RG-5027	\$0.30	\$0.21	\$0.18
0.0033	3.3	4	RG-5033	\$0.30	\$0.21	\$0.18
0.0039	3.9	4	RG-5039	\$0.30	\$0.21	\$0.18
0.0047	4.7	4	RG-5047	\$0.30	\$0.21	\$0.18
0.0056	5.6	4	RG-5050	\$0.30	\$0.21	\$0.18
0.0068	6.8	4	RG-5055	\$0.30	\$0.21	\$0.18
0.0082	8.2	4	RG-5060	\$0.30	\$0.21	\$0.18
0.010	10	4	RG-5065	\$0.30	\$0.21	\$0.18
0.012	12	4	RG-5070	\$0.30	\$0.21	\$0.18
0.015	15	5	RG-5075	\$0.30	\$0.21	\$0.18
0.018	18	5	RG-5080	\$0.30	\$0.21	\$0.18
0.022	22	5	RG-5085	\$0.30	\$0.21	\$0.18
0.027	27	5	RG-5090	\$0.30	\$0.21	\$0.18
0.033	33	5	RG-5095	\$0.30	\$0.21	\$0.18
0.039	39	5	RG-5100	\$0.30	\$0.21	\$0.18
0.047	47	5	RG-5105	\$0.30	\$0.21	\$0.18
0.056	56	6	RG-5110	\$0.30	\$0.21	\$0.18
0.068	68	6.5	RG-5115	\$0.30	\$0.21	\$0.18
0.082	82	6.5	RG-5120	\$0.30	\$0.21	\$0.18
0.10	100	7	RG-5125	\$0.30	\$0.21	\$0.18
0.12	120	7	RG-5130	\$0.30	\$0.21	\$0.18
0.15	150	7.5	RG-5135	\$0.30	\$0.21	\$0.18
0.18	180	7.5	RG-5140	\$0.30	\$0.21	\$0.18
0.22	220	7.5	RG-5145	\$0.30	\$0.21	\$0.18
0.27	270	7.5	RG-5150	\$0.42	\$0.29	\$0.25
0.33	330	8	RG-5153	\$0.42	\$0.29	\$0.25

#### 100VDC LARGE VALUES Suitable for speaker crossovers, etc.

VALUE (µF)	(nF)	PITCH (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
0.47	470	11	RG-5165	\$0.40	\$0.28	\$0.24
0.56	560	15	RG-5166	\$0.60	\$0.42	\$0.36
0.68	680	11	RG-5168	\$1.75	\$1.20	\$1.05
0.82	820	15	RG-5169	\$1.75	\$1.20	\$1.05
1.00	1000	11	RG-5170	\$2.25	\$1.55	\$1.35
1.50	1500	20	RG-5172	\$3.45	\$2.35	\$2.00
2.20	2200	11	RG-5175	\$3.45	\$2.35	\$2.00
3.30	3300	21	RG-5180	\$3.45	\$2.35	\$2.00

#### 630VDC

VALUE (µF)	(nF)	PITCH (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
0.010	10	9	RG-5201	\$0.60	\$0.42	\$0.36
0.022	22	9	RG-5202	\$0.80	\$0.56	\$0.48
0.033	33	14	RG-5203	\$0.95	\$0.65	\$0.55
0.047	47	10	RG-5204	\$0.95	\$0.65	\$0.55
0.047	47	14	RG-5205	\$0.95	\$0.65	\$0.55
0.10	100	14	RG-5210	\$1.40	\$0.95	\$0.80
0.22	220	14	RG-5222	\$1.40	\$0.95	\$0.80
0.47	470	23	RG-5247	\$1.95	\$1.35	\$1.15



### Smart Hardware Competition:

- ANDREW MCCONNELL,  
SHOPS AT JAYCAR RINGWOOD

"A Dual arm kit for kinematics development."





## ▼ CAPACITORS (CONTINUED)

### 50V CERAMIC

- 1pF - 10pF  $\pm 1/4$ pF
- 12pF - 100pF  $\pm 5\%$
- 120pF - 0.022 $\mu$ F  $\pm 10\%$  (Y5P)
- 0.033 $\mu$ F - 0.1 $\mu$ F  $\pm 20\%$  (Y5U)
- 5mm lead spacing • Low inductance

VALUE (pF)	CAT. (PKT 2)	VALUE (pF)	CAT. (PKT 2)
1.0	RC-5300	100	RC-5324
1.2	RC-5301	120	RC-5325
1.5	RC-5302	150	RC-5326
1.8	RC-5303	180	RC-5327
2.2	RC-5304	220	RC-5328
2.7	RC-5305	270	RC-5329
3.3	RC-5306	330	RC-5330
3.9	RC-5307	390	RC-5331
4.7	RC-5308	470	RC-5332
5.6	RC-5309	560	RC-5333
6.8	RC-5310	680	RC-5334
8.2	RC-5311	820	RC-5335
10	RC-5312	1000	RC-5336
12	RC-5313	2200	RC-5340
15	RC-5314	3300	RC-5342
18	RC-5315	4700	RC-5344
22	RC-5316	5600	RC-5345
27	RC-5317	6800	RC-5346
33	RC-5318	8200	RC-5347
39	RC-5319	0.01 $\mu$ F	RC-5348
47	RC-5320	0.022 $\mu$ F	RC-5352
56	RC-5321	0.033 $\mu$ F	RC-5354
68	RC-5322	0.047 $\mu$ F	RC-5356
82	RC-5323	0.1 $\mu$ F	RC-5360

PKT 2	QTY 1+	QTY 25+	QTY 100+
All RC Cat Nos (Pkt 2)	\$0.32	\$0.22	\$0.19

### 0.22 $\mu$ F 220N Lead spacing 5mm

CAT.	QTY 1+	QTY 25+	QTY 100+
(Each) RC-5364	\$0.68	\$0.48	\$0.41

### 50VDC MONOLITHIC

Lead spacing 5mm, low impedance

VALUE( $\mu$ F)	PITCH (mm)	CAT.	QTY 1+	QTY 25+	QTY 100+
0.01	each	RC-5480	\$0.35	\$0.25	\$0.21
0.022	each	RC-5482	\$0.35	\$0.25	\$0.21
0.047	each	RC-5486	\$0.35	\$0.25	\$0.21
0.10	each	RC-5490	\$0.35	\$0.25	\$0.21
0.10	100	RC-5496	\$9.95	\$6.75	\$5.75
0.22	each	RC-5494	\$0.38	\$0.27	\$0.23
0.47	each	RC-5498	\$0.75	\$0.53	\$0.45
1.0	each	RC-5499	\$0.75	\$0.53	\$0.45

### 50VDC BI-POLAR RB ELECTROLYTIC - 85°C



VALUE( $\mu$ F)	SIZE (mm)	PITCH (mm)	RIPPLE (mA)	CAT.	QTY 1+	QTY 25+	QTY 100+
1.0	5 x 11	2.0	8	RY-6802	\$0.55	\$0.39	\$0.33
2.2	5 x 11	2.0	20	RY-6804	\$0.55	\$0.39	\$0.33
3.3	5 x 11	2.0	25	RY-6805	\$0.55	\$0.39	\$0.33
4.7	5 x 11	2.0	30	RY-6806	\$0.55	\$0.39	\$0.33
6.8	5 x 11	2.0	40	RY-6808	\$0.55	\$0.39	\$0.33
10	6.3 x 11	2.5	48	RY-6810	\$0.55	\$0.39	\$0.33
22	8 x 11	3.5	82	RY-6816	\$0.95	\$0.65	\$0.55
33	8 x 11	3.5	98	RY-6818	\$1.15	\$0.80	\$0.65
47	8 x 11	3.5	140	RY-6820	\$1.65	\$1.15	\$0.95
100	10 x 20	5.0	245	RY-6825	\$2.95	\$2.00	\$1.75

### 3KV HIGH VOLTAGE CERAMIC

Value 0.01 $\mu$ F



VALUE( $\mu$ F)	CAT.	QTY 1+	QTY 25+	QTY 100+
0.01	RC-5380	\$2.95	\$2.00	\$1.75

## ▼ CAPACITORS - TAG TANTALUM

### TAG TANTALUM THRU-HOLE

- Resin dipped case
- Price per each
- 5mm lead spacing



#### 16V

VALUE( $\mu$ F)	PITCH (mm)	CAT.	QTY 1+	QTY 25+	QTY 100+
4.7	5.0	RZ-6636	\$0.75	\$0.53	\$0.45
6.8	5.0	RZ-6642	\$1.15	\$0.80	\$0.65
10	5.0	RZ-6648	\$1.15	\$0.80	\$0.65
15	5.0	RZ-6657	\$1.15	\$0.80	\$0.65
22	5.0	RZ-6658	\$1.15	\$0.80	\$0.65
33	5.0	RZ-6665	\$2.65	\$1.85	\$1.55
47	5.0	RZ-6670	\$2.65	\$1.85	\$1.55

#### 25V

VALUE( $\mu$ F)	PITCH (mm)	CAT.	QTY 1+	QTY 25+	QTY 100+
1.0	5.0	RZ-6627	\$0.75	\$0.53	\$0.45
10	5.0	RZ-6650	\$1.15	\$0.80	\$0.65

#### 35V

VALUE( $\mu$ F)	PITCH (mm)	CAT.	QTY 1+	QTY 25+	QTY 100+
0.10	5.0	RZ-6620	\$0.75	\$0.53	\$0.45
0.22	5.0	RZ-6622	\$0.75	\$0.53	\$0.45
0.33	5.0	RZ-6624	\$0.75	\$0.53	\$0.45
0.47	5.0	RZ-6626	\$0.75	\$0.53	\$0.45
1.0	5.0	RZ-6628	\$0.75	\$0.53	\$0.45
1.5	5.0	RZ-6630	\$0.75	\$0.53	\$0.45
2.2	5.0	RZ-6632	\$0.75	\$0.53	\$0.45
4.7	5.0	RZ-6640	\$0.95	\$0.65	\$0.55
6.8	5.0	RZ-6645	\$1.15	\$0.80	\$0.65
10	5.0	RZ-6655	\$1.15	\$0.80	\$0.65

## ▼ PROTOTYPE PACKS - CAPACITORS

- Ideal for prototyping



CERAMIC - RC-5399



100V GREENPACK - RG-5199



MKT - RM-7190



ELECTROLYTIC - RE-6250

VALUE	PACK	CAT.	QTY 1+	QTY 25+	QTY 100+
10pF - 100nF	60	RC-5399	\$9.95	\$6.75	\$5.75
0.001 $\mu$ F - 0.22 $\mu$ F	60	RG-5199	\$11.95	\$8.25	\$6.95
0.001 $\mu$ F - 0.47 $\mu$ F	50	RM-7190	\$16.95	\$11.85	\$10.15
1 $\mu$ F - 470 $\mu$ F	55	RE-6250	\$13.50	\$8.95	\$7.75

### MKT CAPACITOR BARGAIN PACK - ASSORTED TYPES

A vast array of over 90 high quality WIMA brand X2 type and other capacitors. No two bags are the same. Excellent value for money.



Limited stock.

Note: Pack contents may vary to the one shown.

CAT.	QTY 1+
XB-9008	\$24.95

## ✓ CAPACITORS (CONTINUED)

### PC MOUNT RB ELECTROLYTIC - 105°C

10V



VALUE (μF)	PITCH (mm)	Ø X H (mm)	RIPPLE CURRENT MA	CAT.	Qty 1+	Qty 25+	Qty 100+
220	5.0	6.5 x 11	180	RE-6157	\$0.35	\$0.25	\$0.21

16V

VALUE (μF)	PITCH (mm)	Ø X H (mm)	RIPPLE CURRENT MA	CAT.	Qty 1+	Qty 25+	Qty 100+
10	2.0	5 x 11	45	RE-6066	\$0.30	\$0.21	\$0.18
22	2.0	5 x 11	60	RE-6079	\$0.30	\$0.21	\$0.18
47	2.0	5 x 11	100	RE-6100	\$0.35	\$0.25	\$0.21
100	2.5	6.3 x 11	170	RE-6130	\$0.35	\$0.25	\$0.21
220	3.5	8 x 12	280	RE-6158	\$0.40	\$0.28	\$0.24
330	3.5	8 x 12	360	RE-6188	\$0.50	\$0.35	\$0.30
470	3.5	8 x 16	460	RE-6194	\$0.60	\$0.42	\$0.36
1000	5.0	10 x 16	760	RE-6220	\$0.95	\$0.65	\$0.55
2200	5.0	13 x 23	1250	RE-6238	\$1.15	\$0.80	\$0.65
4700	7.5	16 x 26	1960	RE-6243	\$2.25	\$1.55	\$1.35

25V

VALUE (μF)	PITCH (mm)	Ø X H (mm)	RIPPLE CURRENT MA	CAT.	Qty 1+	Qty 25+	Qty 100+
10	2.0	5 x 11	45	RE-6070	\$0.35	\$0.25	\$0.21
22	2.0	5 x 11	70	RE-6090	\$0.35	\$0.25	\$0.21
33	2.0	5 x 11	95	RE-6095	\$0.35	\$0.25	\$0.21
47	2.5	5 x 11	120	RE-6110	\$0.35	\$0.25	\$0.21
100	3.5	8 x 12	180	RE-6140	\$0.45	\$0.32	\$0.27
220	5.0	10 x 13	320	RE-6160	\$0.45	\$0.32	\$0.27
330	5.0	10 x 16	420	RE-6190	\$0.70	\$0.49	\$0.42
470	5.0	10 x 16	540	RE-6195	\$0.75	\$0.53	\$0.45
1000	5.0	13 x 20	900	RE-6230	\$1.15	\$0.80	\$0.65
2200	5.0	13 x 26	1460	RE-6240	\$1.50	\$1.05	\$0.90
4700	7.5	16 x 35	2150	RE-6244	\$3.45	\$2.35	\$2.00

50V

VALUE (μF)	PITCH (mm)	Ø X H (mm)	RIPPLE CURRENT MA	CAT.	Qty 1+	Qty 25+	Qty 100+
4μ7	2.0	5 x 11	35	RE-6058	\$0.35	\$0.25	\$0.21
220	5.0	10 x 17	430	RE-6180	\$1.20	\$0.80	\$0.70
2200	7.5	16 x 35	1900	RE-6241	\$3.25	\$2.25	\$1.90
4700	10	22 x 40	2280	RE-6245	\$5.75	\$3.95	\$3.40

63V

VALUE (μF)	PITCH (mm)	Ø X H (mm)	RIPPLE CURRENT MA	CAT.	Qty 1+	Qty 25+	Qty 100+
μ47	2.0	5 x 11	8	RE-6020	\$0.30	\$0.21	\$0.18
1μ	2.0	5 x 11	15	RE-6032	\$0.30	\$0.21	\$0.18
2μ2	2.0	5 x 11	22	RE-6042	\$0.30	\$0.21	\$0.18
3μ3	2.0	5 x 11	30	RE-6045	\$0.30	\$0.21	\$0.18
4μ7	2.0	5 x 11	40	RE-6060	\$0.35	\$0.25	\$0.21
10	2.0	5 x 11	65	RE-6075	\$0.35	\$0.25	\$0.21
22	2.5	6.3 x 11.5	100	RE-6080	\$0.35	\$0.25	\$0.21
47	3.5	8 x 12	180	RE-6122	\$0.45	\$0.32	\$0.27
100	5.0	8 x 16	280	RE-6150	\$0.95	\$0.65	\$0.55
470	5.0	13 x 25	880	RE-6210	\$1.65	\$1.15	\$0.95
1000	7.5	16 x 30	1400	RE-6236	\$2.45	\$1.70	\$1.45

## Tech Talk: 105°C Electrolytic Capacitors

Our range of RB PC mount electrolytics up to 63 Volt are 105°C rated. This makes for more reliable service. Consider this when making price comparisons with competitors' 85°C products.

### PC MOUNT RB ELECTROLYTIC - 85°C

35V

VALUE (μF)	PITCH (mm)	Ø X H (mm)	RIPPLE CURRENT MA	CAT.	Qty 1+	Qty 25+	Qty 100+
22	5.0	5 x 100	80	RE-6092	\$0.35	\$0.25	\$0.21

### 100VDC NON-POLARISED CROSSOVER TYPE - 85°C

This range is ideal for crossover networks and will handle high power but are suitable for other applications of course. The range includes large values - up to 400μF (required for subwoofers). All capacitors have RT or axial leads.



VALUE(μF)	Ø X L (mm)	CAT.	Qty 1+	Qty 5+	Qty 10+
1	8 x 17	RY-6901	\$2.10	\$1.85	\$1.65
2.2	8 x 17	RY-6902	\$2.10	\$1.85	\$1.65
3.3	8 x 19	RY-6903	\$2.20	\$1.95	\$1.75
4.7	8 x 19	RY-6904	\$2.20	\$1.95	\$1.75
6.8	10 x 19	RY-6906	\$2.50	\$2.21	\$2.05
10	10 x 19	RY-6908	\$2.50	\$2.21	\$2.05
15	10 x 19	RY-6910	\$2.65	\$2.35	\$2.07
22	10 x 24	RY-6912	\$3.10	\$2.75	\$2.45
33	13 x 27	RY-6914	\$3.65	\$3.25	\$2.90
47	13 x 32	RY-6916	\$4.85	\$4.30	\$3.85
68	16 x 34	RY-6918	\$5.50	\$4.90	\$4.30
100	16 x 34	RY-6920	\$7.45	\$6.65	\$5.90
150	18 x 38	RY-6924	\$11.95	\$10.70	\$9.50
220	18 x 44	RY-6928	\$13.95	\$12.35	\$10.95
300	22 x 44	RY-6932	\$18.95	\$16.95	\$14.95
400	22 x 44	RY-6936	\$21.95	\$19.70	\$17.35

### 2.5V SUPER CAPACITORS - 22 & 55 FARAD

These specially engineered capacitors are actually a high-tech energy storage device - not the standard capacitors which they look identical to. Using a new combination manufacturing process where nano surface structured carbon is combined with organic electrolytes, this technique enables these capacitors to store 1,000 times the energy of a standard electrolytic capacitor. The main applications are energy storage at a circuit board level replacing the bulkier secondary batteries which are currently used. Essentially anywhere high energy storage is needed.

- 7.5mm lead spacing
- High density of energy
- Long lifetime (10 years)
- High cycle life (over 500,000 cycles)



VALUE (F)	Ø X H (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
22	16 x 25	RE-6702	\$13.95	\$9.75	\$8.25
55	18 x 40	RE-6704	\$17.95	\$12.35	\$10.75

### 5.5V SUPER CAPACITOR - 0.047 FARAD & 1 FARAD

Super capacitors are a standby power source capable of providing up to 30 days back-up voltage & current to CMOS RAMs during power failures. Never needs replacing or maintenance

- Can be soldered onto PCBs
- Can be charged at high & low current rates i.e. microamps to amps
- 5mm lead spacing



VALUE(μF)	Ø X H (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
0.047	13 x 7.5	RU-6700	\$3.95	\$2.75	\$2.30
1.0	20 x 7.5	RU-6705	\$5.95	\$4.15	\$3.45

### MOTOR RUN CAPACITORS, SINGLE PHASE, ASYNCHRONOUS

These capacitors are designed to replace the original capacitor that has failed. You must replace the part as the motor may simply not work, draw excessive current or have poor torque. These are suitable for motors operating at up to 400VAC and common values are offered here. Please note it is important to choose the correct value for the motor otherwise the starting torque of the motor will change. Two different packages are provided. For the higher valued capacitors it's necessary to use the different case style which provides the important AMP250A terminals and an inbuilt safety device.



CAPACITANCE (μF)	W X D X H (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
6.0 400VAC	49 x 21 x 31	RU-6600	\$16.95	\$11.70	\$9.95
10 400VAC	50 x 25 x 36	RU-6602	\$16.95	\$11.70	\$9.95
12 400VAC	50 x 25 x 40	RU-6604	\$16.95	\$11.70	\$9.95
20 450VAC	45 x 75	RU-6606	\$16.95	\$11.70	\$9.95
30 450VAC	50 x 75	RU-6608	\$16.95	\$11.70	\$9.95



## CAPACITORS (CONTINUED)

### HIGH VOLTAGE RB ELECTROLYTIC

• 85°C rated

450V

\*RE-6156 is 400V rated.

VALUE (μF)	PITCH (mm)	Ø X H (mm)	RIPPLE CURRENT (mA)	CAT.	Qty 1+	Qty 25+	Qty 100+
1	3.5	10 x 14.5	12	RE-6034	\$1.75	\$1.20	\$1.05
2μ2	5.0	10 x 17	28	RE-6044	\$1.75	\$1.20	\$1.05
4μ7	5.0	10 x 20.5	48	RE-6062	\$2.50	\$1.75	\$1.50
10	5.0	13 x 21.5	75	RE-6078	\$3.50	\$2.45	\$2.05
47	8.0	17.5 x 36	285	RE-6125	\$7.50	\$5.25	\$4.45
100	13	18x42.5	521	RE-6156*	\$7.95	\$5.50	\$4.75

### LOW IMPEDANCE\* OR ESR<sup>1</sup> CAPACITORS

Stable, low impedance characteristics High ripple current\* Low DC leakage current Extended life - high reliability withstanding 2,000 to 4,000 hours load life at 105°C

Radial leads on standard pitch

\*Impedance: max at 20°C 100kHz

\*\*Ripple current measured at 105°C 100kHz.

v<sup>1</sup>Equivalent Series Resistance

10VDC

VALUE	Ø X H (mm)	IMPEDANCE Ω*	RIPPLE CURRENT RMS	CAT.	Qty 1+	Qty 25+	Qty 100+
220μF	6.3 x 12	0.2	340mA	RE-6300	\$0.42	\$0.29	\$0.25
470μF	8 x 11	0.13	640mA	RE-6302	\$0.50	\$0.35	\$0.30
1000μF	10 x 16	0.06	1210mA	RE-6304	\$0.85	\$0.60	\$0.51
2200μF	10 x 16	0.05	1900mA	RE-6306	\$1.25	\$0.85	\$0.75
4700μF	13 x 24	0.028	2552mA	RE-6308	\$2.25	\$1.55	\$1.35

16VDC

VALUE	Ø X H (mm)	IMPEDANCE Ω*	RIPPLE CURRENT RMS	CAT.	Qty 1+	Qty 25+	Qty 100+
100μF	6.3 x 11	0.22	340mA	RE-6310	\$0.42	\$0.29	\$0.25
220μF	8 x 11	0.13	640mA	RE-6312	\$0.46	\$0.32	\$0.28
470μF	8 x 16	0.087	840mA	RE-6314	\$0.85	\$0.60	\$0.51
1000μF	10 x 20	0.046	1400mA	RE-6316	\$1.25	\$0.85	\$0.75
2200μF	16 x 25	0.035	2210mA	RE-6318	\$1.65	\$1.15	\$0.95
4700μF	16 x 32	0.022	3029mA	RE-6320	\$2.95	\$2.00	\$1.75

25VDC

VALUE	Ø X H (mm)	IMPEDANCE Ω*	RIPPLE CURRENT RMS	CAT.	Qty 1+	Qty 25+	Qty 100+
100μF	8 x 11	0.22	340mA	RE-6322	\$0.50	\$0.35	\$0.30
220μF	8 x 12	0.13	640mA	RE-6324	\$0.50	\$0.35	\$0.30
470μF	10 x 16	0.060	1210mA	RE-6326	\$0.95	\$0.65	\$0.55
1000μF	13 x 20	0.035	1900mA	RE-6328	\$1.50	\$1.05	\$0.90
2200μF	16 x 25	0.022	2743mA	RE-6330	\$1.85	\$1.25	\$1.10

35VDC

VALUE	Ø X H (mm)	IMPEDANCE Ω*	RIPPLE CURRENT RMS	CAT.	Qty 1+	Qty 25+	Qty 100+
47μF	6.3 x 11	0.22	340mA	RE-6332	\$0.42	\$0.29	\$0.25
100μF	8 x 11	0.13	640mA	RE-6334	\$0.50	\$0.35	\$0.30
220μF	10 x 16	0.09	840mA	RE-6336	\$0.80	\$0.56	\$0.48
470μF	10 x 20	0.046	1400mA	RE-6338	\$1.40	\$0.95	\$0.80
1000μF	16 x 25	0.035	2552mA	RE-6340	\$1.95	\$1.35	\$1.15

63VDC

VALUE	Ø X H (mm)	IMPEDANCE Ω*	RIPPLE CURRENT RMS	CAT.	Qty 1+	Qty 25+	Qty 100+
22μF	6.3 x 11	0.70	180mA	RE-6342	\$0.42	\$0.29	\$0.25
47μF	8 x 11.5	0.30	295mA	RE-6344	\$0.50	\$0.35	\$0.30
100μF	10 x 20	0.12	760mA	RE-6346	\$0.95	\$0.65	\$0.55
220μF	10 x 20	0.060	1220mA	RE-6348	\$1.25	\$0.85	\$0.75
470μF	16 x 20	0.043	1690mA	RE-6350	\$1.75	\$1.20	\$1.05

## Tech Talk: Low ESR Capacitors

ESR means Equivalent Series Resistance. Ordinary electrolytics are constructed in such a way that they can be quite "leaky", i.e. will conduct a small amount of DC current. They also have a fairly high impedance. This is not a problem if they are just used to filter 50 or 100Hz pulsating DC in a linear power supply. It is a problem if there is a high repetition pulse on, say, a switchmode DC supply line that needs to be filtered. A pulse train of, say, 50kHz will be virtually "ignored" by a standard electrolytic. A low ESR device has the ability to integrate the pulses into a smooth DC rail, and as a bonus not heat up in the process.

### RBLL LOW LEAKAGE ELECTROLYTIC

• 85°C rated Leakage characteristic similar to tantalum caps, but at a lower price

25V

VALUE	LEAD SPACING	SIZE Ø X H	CAT.	Qty 1+	Qty 25+	Qty 100+
22μF	2.5mm	6.3 x 11mm	RL-6430	\$0.65	\$0.46	\$0.39
33μF	2.5mm	6.3 x 11mm	RL-6432	\$0.65	\$0.46	\$0.39
47μF	3.5mm	8 x 12mm	RL-6434	\$0.95	\$0.65	\$0.55
100μF	3.5mm	8 x 12mm	RL-6436	\$1.10	\$0.75	\$0.65

50V

VALUE	LEAD SPACING	SIZE Ø X H	CAT.	Qty 1+	Qty 25+	Qty 100+
0μ1μF	2.0mm	5 x 11mm	RL-6402	\$0.48	\$0.34	\$0.29
0μ22μF	2.0mm	5 x 11mm	RL-6406	\$0.48	\$0.34	\$0.29
0μ33μF	2.0mm	5 x 11mm	RL-6408	\$0.48	\$0.34	\$0.29
0μ47μF	2.0mm	5 x 11mm	RL-6410	\$0.48	\$0.34	\$0.29
0μ68μF	2.0mm	5 x 11mm	RL-6412	\$0.48	\$0.34	\$0.29
1μ0μF	2.0mm	5 x 11mm	RL-6414	\$0.48	\$0.34	\$0.29
1μ5μF	2.0mm	5 x 11mm	RL-6418	\$0.48	\$0.34	\$0.29
2μ2μF	2.0mm	5 x 11mm	RL-6420	\$0.48	\$0.34	\$0.29
3μ3μF	2.0mm	5 x 11mm	RL-6422	\$0.48	\$0.34	\$0.29
4μ7μF	2.0mm	5 x 11mm	RL-6424	\$0.48	\$0.34	\$0.29
10μF	2.5mm	6.3 X 11mm	RL-6428	\$0.67	\$0.47	\$0.40

### RP ELECTROLYTIC

This style of capacitor is distinguished because, whilst bulky, does not need a chassis clamp. Fixing is by the stout lead wires. While soldered retention is generally adequate. For applications where vibration is an issue a dab of silicone under the component is recommended. 85°C rated

40V

VALUE	RIPPLE CURRENT	SIZE	CAT.	Qty 1+	Qty 25+	Qty 100+
5600μF	2.4A	26 x 42mm	RU-6709	\$8.95	\$6.25	\$5.25
10000μF	2.7A	26 x 51mm	RU-6720	\$11.95	\$8.25	\$6.95

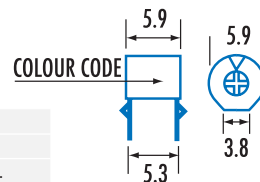
### RG CHASSIS MOUNT ELECTROLYTIC

• 85°C rated

VALUE	RIPPLE CURRENT	SIZE Ø X H	VOLT	CAT.	Qty 1+	Qty 25+	Qty 100+
4000μF	4.6A	35 x 51mm	75V	RU-6708	\$11.95	\$8.25	\$6.95
8000μF	3.47A	35 x 76mm	80V	RU-6710	\$14.95	\$10.35	\$8.75
10000μF	8.1A	50 x 80mm	100V	RU-6712	\$28.95	\$19.95	\$14.95

All supplied with mounting bracket. Height and diameter column excludes lugs - 8mm.

## TRIMMERS

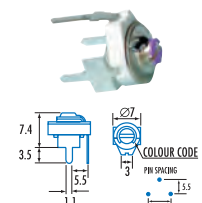


SPECIFICATIONS	ALL
Working Voltage	50V DC.
Insulation Resistance	>104MΩ min at 250VDC.
Operating Temp	-30°C to +85
Withstand Voltage	110VDC
Turning Torque	20 to 200gr/cm

CAP(PF)	TEMP CO-EFFICIENT	COLOUR	CAT.	Qty 1+	Qty 25+	Qty 100+
3-10	N470	White	RV-5714	\$1.85	\$1.65	\$1.25
6.2-30	N750	Green	RV-5716	\$1.85	\$1.65	\$1.25
6.8-40	N1200	Yellow	RV-5718	\$1.85	\$1.65	\$1.25
9.8-50	N1200	Brown	RV-5720	\$1.85	\$1.65	\$1.25

### 8.5-100PF CERAMIC TRIMMER

SPECIFICATIONS	RV-5722
Working Voltage	225VDC.
Insulation Resistance	>104MΩ min at 250VDC.
Withstand Voltage	500VDC
Temperature coefficient	N2200.
Colour	Purple



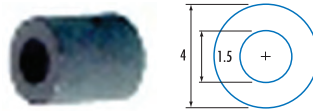
CAPACITANCE(PF)	VOLTAGE	CAT.	Qty 1+	Qty 25+	Qty 100+
8.5-100	225VDC	RV-5722	\$2.95	\$2.00	\$1.75



## FERRITES

### FERRITE BEAD

These small tubes can be threaded on to a wire to provide RF or interference suppression at frequencies higher than the normal operating range of the equipment to be protected.

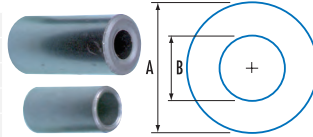


LENGTH(mm)	PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
5.0	6	LF-1250	\$3.95	\$2.75	\$2.30

### FERRITE SUPPRESSION SLEEVES

Similar to suppression beads (see above) but longer for greater attenuation.

CAT.	TYPICAL IMPEDANCE	
	(Z)@25MHz	(Z)@100MHz
LF-1256	52	66
LF-1258	130	200
LF-1260	161	255

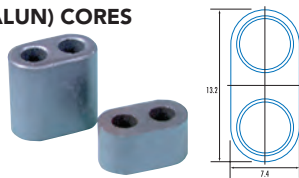


LENGTH(mm)	A (mm)	B (mm)	PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
16	8.0	5.6	6	LF-1256	\$4.95	\$3.45	\$2.90
20	12	5.6	6	LF-1258	\$6.50	\$4.45	\$3.75
29	16	8.0	6	LF-1260	\$7.50	\$5.25	\$4.45

### STANDARD TRANSFORMER (BALUN) CORES

Generally used in VHF/UHF circuits for balanced or unbalanced line matching. Can also be used as a lossy choke, etc.

- Material: Type M7
- Insertion Loss: 40-220MHz 0.5dB
- > 220MHz 1.0dB



LENGTH(mm)	PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
6.0	2	LF-1222	\$2.50	\$1.75	\$1.50
14	2	LF-1220	\$2.50	\$1.75	\$1.50

### FERRITE FLAT BAR

- Short and compact
- Ideal for MW tuned circuits
- Frequency: 0.5 - 10MHz
- Also suitable for suppression work



L X W X D (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
40 x 12 x 5	LF-1016	\$2.50	\$1.75	\$1.50

### FERRITE ROUNDS

- 9mm diameter
- Material S-1
- Ideal for MW tuned circuits or suppression work



Ø X W (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
9 x 100	LF-1010	\$2.50	\$1.75	\$1.50
9 x 180	LF-1012	\$5.25	\$3.60	\$3.15

### FERRITE ROD WITH COIL

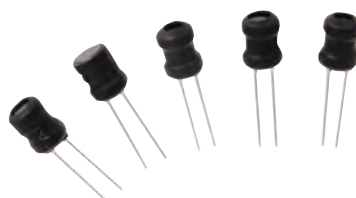
Small ferrite rod complete with pre-wound standard broadcast band coil. Ideally suitable to our 60-160pf mini tuning capacitor.



L X W X D (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
55 x 12.5 x 4.5	LF-1020	\$3.50	\$2.45	\$2.05

### HIGH FREQUENCY FERRITE CHOKES

PCB mounting ferrite chokes suitable for high frequency circuits.



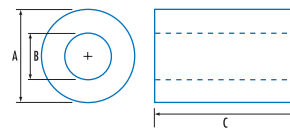
INDUCTANCE	PITCH (mm)	CAT.	Qty 1+	Qty 25+	Qty 100+
47µH	5.0	LF-1100	\$0.85	\$0.60	\$0.51
100µH	5.0	LF-1102	\$0.85	\$0.60	\$0.51
330µH	5.0	LF-1106	\$0.85	\$0.60	\$0.51
470µH	5.0	LF-1108	\$0.85	\$0.60	\$0.51

### TOROID (OR RING) CORES

Toroid (both ferrite and powdered iron) are commonly used as cores for transformers or chokes mainly for RF suppression but also for any application where a compact reactive component is needed.

#### FERRITE MATERIAL

Drawing for both ferrite and powdered iron types. See website for more info.



#### MATERIAL L8 SIZE 18(A) X 10(B) X 6(C) (mm)

PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
6	LO-1230	\$3.50	\$2.45	\$2.05

#### MATERIAL L8 SIZE 25(A) X 15(B) X 10(C) (mm)

PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
4	LO-1234	\$4.95	\$3.45	\$2.90

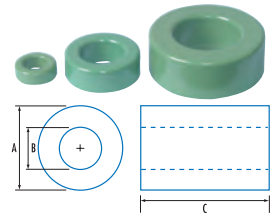
#### MATERIAL L15 SIZE 35(A) X 21(B) X 13(C) (mm)

PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
2	LO-1238	\$4.95	\$3.45	\$2.90

### POWDERED IRON CORES

These toroids are made out of compressed powdered iron and coated with a tough epoxy material. They are ideal for RF suppression of light dimmers, motor speed controllers, switch mode power supplies etc.

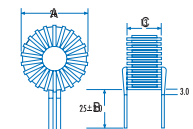
- Colour: Green epoxy coating
- Contact us for bulk quantity prices
- Material HY-2



A X B X C (mm)	PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
15 x 8 x 6.5	4	LO-1242	\$6.50	\$4.45	\$3.75
28 x 14 x 11	2	LO-1244	\$5.50	\$3.75	\$3.25
42 x 22 x 17	1	LO-1246	\$8.95	\$6.25	\$5.25

### THROUGH HOLE EMC/RFI SUPPRESSION CHOKES

Ideal for all wideband choke applications. Highly effective against EMI/RFI entering equipment via the mains power lines. Powdered iron core.



SPECIFICATIONS	LF-1270	LF-1272	LF-1274	LF-1276	LF-1278
RDC mΩ	50	25	25	60	82
Wire Dia mm	1.0	0.8	1.0	1.0	1.0
Dimension A mm	26	21	24.5	28.5	31
Dimension B mm	25	10	10	10	10
Dimension C mm	13	10.5	10	13	17



INDUCTANCE (µH)	CURRENT (A)	CAT.	Qty 1+	Qty 25+	Qty 100+
100	3A	LF-1272	\$3.95	\$2.75	\$2.30
100	5A	LF-1270	\$3.95	\$2.75	\$2.30
47	5A	LF-1274	\$3.95	\$2.75	\$2.30
220	5A	LF-1276	\$5.95	\$4.15	\$3.45
470	5A	LF-1278	\$6.95	\$4.75	\$4.15

### SMS TYPE EMC/RFI SUPPRESSION CHOKES

These popular devices complement our wire - terminated LF-1270 style ferrite chokes. Good suppression of RF-EMI from DC/DC converters or any circuit which generates commutation noise etc. which needs to be suppressed to meet regulations. Supplied in bags of 10 cut from a tape reel.



SPECIFICATIONS	LF-1400	LF-1402
Inductance	100uH±10%	100uH±20%
Series DC Resistance (RDC)	0.99Ω	179.6mΩ max
Rated DC Current	520mA	1.8A
Size	5.8 x 4.5mm	12 x 12 x 8mm

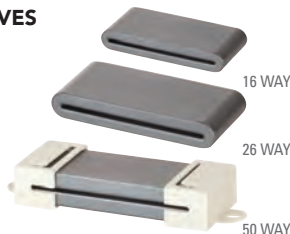
PKT	CAT.	Qty 1+	Qty 25+	Qty 100+
10	LF-1400	\$7.95	\$5.50	\$4.75
10	LF-1402	\$12.95	\$8.95	\$7.75

## ✓ FERRITES (CONTINUED)

Ferrite is a ceramic material with Iron Oxide - up to 50% - then with oxides of manganese and zinc or nickel. The ceramic material is mixed with these substances, pressed or extruded into useful shapes and finally fired in a furnace to their final hard, brittle state. From this there are two forms: Manganese - Zinc (Mn-Zn) ferrites which are the most common and are used for lower frequency work. They have higher permeability than the higher frequency type which have Nickel and Zinc Oxide components. The products shown in this catalogue are Mn-Zn types. For more information check our website.

### FLAT CABLE SUPPRESSION SLEEVES

These devices are designed to suppress high frequency (fast rise time) interference (radiation) to and from PC boards, printers, disk drives etc. The ferrite makes the cable behave like a high impedance choke at high frequencies.



#### FOR 16 WAY RIBBON CABLE

TYPICAL IMPEDANCE	25MHZ	100MHZ	CAT.	Qty 1+	Qty 25+	Qty 100+
Pkt 2	54Ω	120Ω	LF-1280	\$5.95	\$4.15	\$3.45

#### FOR 26 WAY RIBBON CABLE

TYPICAL IMPEDANCE	25MHZ	100MHZ	CAT.	Qty 1+	Qty 25+	Qty 100+
Each	38Ω	91Ω	LF-1284	\$6.95	\$4.75	\$4.15

#### FOR 50 WAY RIBBON CABLE

TYPICAL IMPEDANCE	25MHZ	100MHZ	CAT.	Qty 1+	Qty 25+	Qty 100+
Each	72Ω	190Ω	LF-1286	\$12.95	\$8.95	\$7.75

## Round Cable Suppression Sleeves

Basically a split high permeability ferrite core with a plastic case, these devices are ideal where parasitic voltage spikes or RF breakthrough are a problem or potential problem. The cores come in a hinged plastic case, simply snap on to the computer or data cable. Three versions are offered which cover most computer leads etc. For extra security, lock assembly together with a cable tie.



### TYPICAL IMPEDANCE VS FREQUENCY

(Rise Time of Interference Signal) Note: All figures are approximate

MODEL	CABLE DIA	1MHZ	25MHZ	50MHZ	100MHZ	300MHZ	500MHZ
U-25	12.5	10Ω	150Ω	200Ω	250Ω	290Ω	200Ω
U-16	8.3	20Ω	100Ω	200Ω	220Ω	150Ω	<100Ω
U-15	7.0	<10Ω	160Ω	220-250Ω	280Ω	300+Ω	245Ω

#### PLEASE NOTE:

- Full specifications available on website.
- If the cable can be looped through the core twice or more (obviously only for thinner cables) the attenuation is increased substantially.

#### MODEL U25:

This offers impedance (peak approx 300Ω at 2-300MHz) with negligible impedance below 1MHz. Plastic case measures 32L x 30mm square. It will take a lead up to 12mm (1/2") diameter but preferably 10mm.

#### MODEL U16:

A compact attenuator that will pass a cable up to 8mm dia (most monitor cables etc). Typical impedance at 25MHz 300Ω approx, 590Ω at 100MHz dropping off after that. Case measures 25.9(L) x 21.5(Dia)mm.

#### MODEL U15:

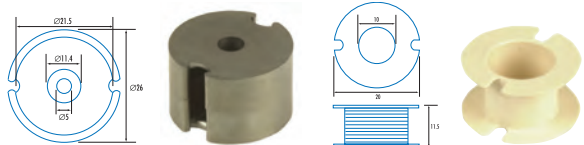
This model is for 7mm dia cable or smaller.  
• Offers good protection up to 500MHz

	CAT.	Qty 1+	Qty 25+	Qty 100+
Each	LF-1290	\$9.95	\$6.75	\$5.75
Pkt 4	LF-1292	\$12.95	\$8.95	\$7.75
Pkt 2	LF-1294	\$9.95	\$6.75	\$5.75

## ✓ POT CORE & BOBBIN

This handy sized pot core set is made from low loss material and is equivalent to the original Philips FX 2240 part.

- Size (each half): 26(OD) x 11.5(ID) x 8(H)mm
- Material: FP4



	CAT.	Qty 1+	Qty 25+	Qty 100+
Pot Core - pair	LF-1060	\$6.95	\$4.75	\$4.15
Bobbin to suit	LF-1062	\$1.35	\$0.90	\$0.80

## ✓ RF CHOKES

### SPECIFICATIONS

#### Axial Leads

### ALL MODELS

Colour coded per IEC

#### Tolerance

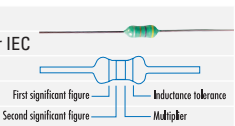
±10%,

#### Rated Temp. Rise

-20°C to +80°C

#### Dielectric Withstanding Voltage

250Vrms



(μH) DC INDUCTANCE	RATED RESISTANCE (Ω)	DC CURRENT MAX	CAT.
1μ0	0.09	920mA	LF-1510
1μ5	0.23	830mA	LF-1512
2μ2	0.28	750mA	LF-1514
3μ3	0.34	670mA	LF-1516
4μ7	0.39	620mA	LF-1518
6μ8	0.48	550mA	LF-1520
10	0.58	500mA	LF-1522
15	0.72	460mA	LF-1524
22	0.84	410mA	LF-1526
33	1.03	370mA	LF-1528
47	1.22	340mA	LF-1530
68	1.47	305mA	LF-1532
100	1.80	275mA	LF-1534
150	4.20	175mA	LF-1536
220	5.10	155mA	LF-1538
330	6.40	137mA	LF-1540
470	7.70	126mA	LF-1542
680	9.40	113mA	LF-1544
1000	14.00	100mA	LF-1546

	Qty 1+	Qty 25+	Qty 100+
All of the above	\$0.75	\$0.53	\$0.45

## ✓ FERRITE RF COIL PACK

### MINI RF COIL PACK

Set of 4 standard coils for AM section of a superheterodyne receiver with 455kHz. IF offset. Colour dot on top of ferrite slug indicates type.

- Red is the oscillator coil
- White is the first 455kHz IF
- White is the 2nd
- Black is the 3rd
- See website for more information

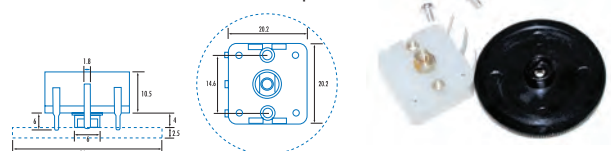


	CAT.	Qty 1+	Qty 25+	Qty 100+
	LF-1050	\$5.95	\$4.15	\$3.45

## ✓ MINI TUNING GANG CAPACITOR

As used in most transistor radios and many kits that incorporate a radio.

- Size 20 x 20 x 10.5 high (mm)
- Supplied with 35(mm) dia. plastic knob & screw
- Capacitance range 60 - 160pF
- Suitable Ferrite Aerial Coil shown on p121 Cat. LF-1020



	CAT.	Qty 1+	Qty 25+	Qty 100+
20 x 20 x 10.5	RV-5728	\$4.75	\$3.30	\$2.75



## EMI FILTERS

### IEC EMI POWER LINE FILTER - 6 AMP

These Industry standard design RF/EMI filters are designed to reduce line - to - ground (common mode) interference. They accept a standard IEC power line connector and are panel mounted. They meet (or exceed) international standard leakage requirements and are rated for mains voltages of 115 to 250V, 50, 60Hz.

- Safety & construction are in compliance with UL, CSA, VDE



SPECIFICATIONS		MS-4003	
Rated Voltage		115/250VAC	
Power Line Freq		50/60Hz	
Rated Current		6 amps	
Maximum Leakage Current		@ 115 VAC 60Hz 0.25mA	
Line To Ground		@ 250VAC 50Hz 0.50mA	
Test Voltage		Line to ground: 2250VDC, one minute Line to line: 1450VDC, one minute	
Typical Insertion Loss (dB) =		Line-to-ground in 50Ω system.	
Current	Freq (MHz)		
Rating	0.15 0.5 1 5 10 30		
6A	10 20 25 42 45 50		
CAT.	Qty 1+	Qty 4+	Qty 10+
MS-4003	\$9.95	\$8.75	\$7.75

### 240V AC EMI FILTER

Designed for mounting inside a chassis, these industry standard RF/EMI filters are pre-designed to reduce line-to-ground (common mode) interference. Rated for mains voltages of 125 or 240VAC 50 or 60Hz, they are very useful when mains cords are fixed to the outside chassis and an IEC320 inlet is not suitable.



## POWERTECH

MS-4000

SPECIFICATIONS		MS-4000/MS-4001
Rated Voltage		250VAC, 50Hz
Rated Current		10A
Leak Current		0.8mA max
Insulation Resistance		100M Ω min
Attenuation		1 - 50MHz
Termination		PCB mounting pins (MS-4000) & solder tags (MS-4001)
Dimensions: MS-4000		36(L) x 31(W) x 19(H)mm
Dimensions: MS-4001		50(L) x 25(W) x 31(H)mm



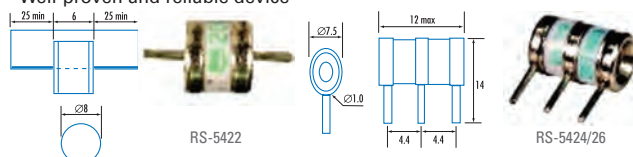
	CAT.	Qty 1+	Qty 25+	Qty 100+
PCB Mount - 4 Way	MS-4000	\$7.95	\$6.95	\$6.25
Chassis Mount - 6 Way	MS-4001	\$9.95	\$6.75	\$5.75

## SURGE ARRESTORS

### GAS DISCHARGE TYPE SURGE ARRESTERS

Gas discharge arresters are ideal for quenching high voltage, fast rise-time interference transients. They are very high impedance (virtually open circuit) in the normal state with a typical capacitance of 1pF between electrodes. When a voltage spike appears, they arc over and present a relatively low impedance in this condition effectively quenching the spike. They are suitable for protection of telecom lines and antenna circuits. They are not recommended to be fitted across mains circuits as the low source impedance of the mains could destroy these devices after the fault spike oh no! has cleared.

- Well-proven and reliable device



DC SPARK OVER VOLTAGE	AXIAL 2 ELECTRODES	PCB MOUNT 3 ELECTRODES	<b>MANUFACTURERS: CONTACT US FOR BULK PRICES.</b>			
90V ±20%		Cat. RS-5424				
230V ±15%	Cat. RS-5422	Cat. RS-5426				
	CAT.	Qty 1+	Qty 10+	Qty 25+		
230V	2 Electrodes	RS-5422	\$9.95	\$8.75	\$7.75	
90V	3 Electrodes	RS-5424	\$9.95	\$8.75	\$7.75	
230V	3 Electrodes	RS-5426	\$9.95	\$8.75	\$7.75	

## VOLTAGE PROTECTION

### METAL OXIDE VARISTORS (MOV)

Ideal protection against voltage spikes or transients. Most mains filters have MOVs. Helps to prevent damage to sensitive equipment such as microprocessors and digital electronics.

- Resin dipped case
- Prices per unit



VOLT	DIA	CLAMPING VOLTAGE	PEAK CURRENT	MAX ENERGY	CAT.	Qty 1+	Qty 10+	Qty 25+
10VAC	8	143V	100A	0.4J	RN-3411	\$1.75	\$1.55	\$1.40
10VAC	13.5	18V	500A	2.8J	RN-3412	\$1.75	\$1.55	\$1.40
10VAC	17.5	143V	1000A	6.6J	RN-3413	\$1.75	\$1.55	\$1.40
275VAC	13.5	710V	2500A	60J	RN-3406	\$1.75	\$1.55	\$1.40
275VAC	17.5	710V	4500A	115J	RN-3400	\$1.75	\$1.55	\$1.40
275VAC	24	710V	6500A	190J	RN-3404	\$1.75	\$1.55	\$1.40
460VAC	13.5	750V	2500A	125J	RN-3415	\$1.75	\$1.55	\$1.40
460VAC	17.5	750V	4500A	203J	RN-3416	\$1.75	\$1.55	\$1.40
460VAC	24	1240V	6500A	266J	RN-3417	\$1.75	\$1.55	\$1.40

## TRANSIENT VOLTAGE SUPPRESSORS (TVS)

- Excellent clamping voltage
- Low Zener impedance
- Fast response time
- Operating & storage temperature -55°C to 175°C



### 400W RANGE (DC) • Peak power: 400W • Steady state: 1W

STANDOFF VOLTAGE	Vbr	CLAMP VOLTAGE	PEAK	PACKAGE SIZE	CAT.	Qty 1+	Qty 10+	Qty 25+
5.5V	6.12	10.8V	38A	D0-41	ZR-1150	\$1.75	\$1.55	\$1.40
12.1V	13.5	22.0V	19A	D0-41	ZR-1152	\$1.75	\$1.55	\$1.40
12.9V	14.4	23.5V	18A	D0-41	ZR-1154	\$1.75	\$1.55	\$1.40

### 400W RANGE (AC) • Peak power: 400W • Steady state: 1W

STANDOFF VOLTAGE	Vbr	CLAMP VOLTAGE	PEAK	PACKAGE SIZE	CAT.	Qty 1+	Qty 10+	Qty 25+
12.8V	14.3	21.2V	20A	D0-41	ZR-1160	\$1.85	\$1.65	\$1.45
13.6V	15.2	22.5V	19A	D0-41	ZR-1162	\$1.85	\$1.65	\$1.45
342V	380	548V	0.7A	D0-41	ZR-1164	\$3.95	\$3.45	\$3.15

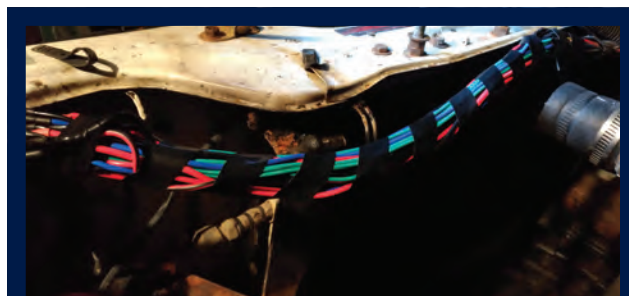


### 1500W RANGE (DC) • Peak power: 1500W • Steady state: 5W

STANDOFF VOLTAGE	Vbr	CLAMP VOLTAGE	PEAK	PACKAGE SIZE	CAT.	Qty 1+	Qty 10+	Qty 25+
12.1V	13.5	22V	69.1A	D0-201	ZR-1168	\$2.95	\$2.60	\$2.40
12.9V	14.4	23.5V	64.7A	D0-201	ZR-1170	\$2.95	\$2.60	\$2.40

### 1500W RANGE (AC) • Peak power: 1500W • Steady state: 5W

STANDOFF VOLTAGE	Vbr	CLAMP VOLTAGE	PEAK	PACKAGE SIZE	CAT.	Qty 1+	Qty 10+	Qty 25+
13.6V	15.2	22.5V	67.6A	D0-201	ZR-1175	\$3.95	\$3.45	\$3.15
30.8V	34.2	49.9V	30.5A	D0-201	ZR-1177	\$4.95	\$4.45	\$3.90
342V	380	548V	2.8A	D0-201	ZR-1180	\$4.95	\$4.45	\$3.90



## Smart Hardware Competition:

- JASON SYMES, SHOPS AT JAYCAR REYNELLA

"Cooked my main loom in the Pajero. Jaycar had all matching gauge wire on shelf. Easy"





## ✓ PLASTIC KNOBS



### FLUTED PLASTIC WITH POINTER SLOT & SKIRT

Grubscrew fixing - brass insert. Suit 0.25"/6.35mm shaft.



**LIFETIME WARRANTY ON ALL KNOBS!**

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	16 x 14	HK-7760	\$1.65	\$1.45	\$1.30
Black	20 x 16	HK-7762	\$2.15	\$1.90	\$1.70
Black	24 x 20	HK-7764	\$2.50	\$2.20	\$2.05
Black	35 x 19	HK-7766	\$3.45	\$3.05	\$2.75

### PUSH ON - COLOURED CAP

Suit 0.25"/6.35mm shaft.

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Red	18 x 20	HK-7705	\$0.95	\$0.85	\$0.75
Yellow	18 x 20	HK-7713	\$0.95	\$0.85	\$0.75
Black	18 x 20	HK-7707	\$0.95	\$0.85	\$0.75
White	18 x 20	HK-7715	\$0.95	\$0.85	\$0.75
Blue	18 x 20	HK-7709	\$0.95	\$0.85	\$0.75
Grey	18 x 20	HK-7717	\$0.95	\$0.85	\$0.75
Green	18 x 20	HK-7711	\$0.95	\$0.85	\$0.75

### BLACK PLASTIC WITH POINTER

Brass ferrule insert. Suit 0.25"/6.35mm shaft.

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	23 x 14	HK-7787	\$1.85	\$1.65	\$1.45

### METRIC

Suits our 9mm Mini Potentiometers. Matches HK-7760/66 series. Fits all standard metric shafts, including RP-8504 series, RP-8610 series & RP-8706 series on page 125.



COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	15 x 14	HK-7770	\$1.75	\$1.55	\$1.40
Black	20 x 16	HK-7772	\$2.15	\$1.90	\$1.70

### SKIRT NUMBERED 1-10

Grubscrew fixing - brass ferrule insert. Suit 0.25"/6.35mm shaft.

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Silver/Black	29 x 18	HK-7788	\$3.45	\$3.05	\$2.75
Silver/Black	36 x 23.5	HK-7549	\$3.45	\$3.05	\$2.75

### PUSH ON - 18T SPLINE

Suits our 9mm Mini Potentiometers. Matches HK-7760/66 series.

Fits all standard metric shafts.

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Grey/Red	13 x 18	HK-7730	\$1.15	\$1.00	\$0.90
Grey/Yellow	13 x 18	HK-7731	\$1.15	\$1.00	\$0.90
Grey/Green	13 x 18	HK-7732	\$1.15	\$1.00	\$0.90
Grey/Blue	13 x 18	HK-7733	\$1.15	\$1.00	\$0.90
Grey/White	13 x 18	HK-7734	\$1.15	\$1.00	\$0.90

### PLASTIC POINTER

Suit 0.25"/6.35mm shaft.

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	19 x 32	HK-7700	\$1.65	\$1.45	\$1.30

### CAUTION WHEN ORDERING!

When ordering knobs (from any supplier) double check that the knob you are getting will fit the shaft of the component you are using it with. For example a knob with a 6mm shaft hole will not accept a 1/4" shaft. As you are probably aware 1/4" equals 6.35mm.

That 0.35mm is enough to render the knob unusable. So called "metric" knobs often have an 18 spline interference fit hole suitable only for push-on type aluminium shafts. Note: Apart from metric, all knobs shown on this page fix to 0.25" /6.35mm shafts (with flat) unless otherwise stated.

## ✓ ALUMINIUM / PLASTIC INSERT KNOBS



### BRUSHED ALUMINIUM

Ideal for HiFi projects. Suit 0.25"/6.35mm shaft.

Grub screw fixing.



COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Silver	16 x 14	HK-7020	\$3.45	\$3.05	\$2.75
Silver	22 x 14	HK-7022	\$3.65	\$3.25	\$2.90

### BLACK ANODISED ALUMINIUM

Grub screw fixing. Suit 0.25"/6.35mm shaft.

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	16 X 14	HK-7009	\$3.45	\$3.05	\$2.75
Black	22 x 14	HK-7010	\$3.65	\$3.25	\$2.90
Black	29 x 14	HK-7011	\$4.95	\$4.45	\$3.90



### BLACK PLASTIC WITH ALUMINIUM INSERT

White pointers - brass insert.

Grub screw fixing.

Suit 0.25"/6.35mm shaft.



**LIFETIME WARRANTY ON ALL KNOBS!**

COLOUR	Ø X H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Silver/Black	20 x 18	HK-7786	\$2.85	\$2.53	\$2.23
Silver/Black	27 x 15	HK-7740	\$1.85	\$1.65	\$1.45
Silver/Black	32 x 17	HK-7741	\$2.45	\$2.20	\$1.95
Silver/Black	45 x 20	HK-7742	\$4.65	\$4.15	\$3.65

## POTENTIOMETERS

### 9mm SQUARE PCB MOUNTING

These pots are rapidly becoming the industry standard for miniaturised audio, digital and telecommunications equipment. This series features good solder bath immersion resistance, 300° rotation and standard 18 tooth metric pre-cut actuator shafts. Two popular metric knobs are now carried, however metric knobs are now commonly available. Both single and dual gang types are stocked in log and linear resistance tapers.

ELECTRICAL	LINEAR TAPER (B)	OTHER MECHANICAL TAPER
Rated Wattage	0.05W	0.02W
Rated Voltage	50VAC	50VAC
Slider Noise	<100mV	
Insulation Resistance	>100MΩ at 250VDC	
Dielectric	300VAC/Minute	
Tracking Error	Within 3dB at 40-0dB	
		Rotation Angle 300° ±5°
		Rotation Torque 20-250gf.cm
		Stop Strength 5kgf.cm/min.

#### LOG SINGLE GANG (A)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
10kΩ	RP-8610	\$3.50	\$2.75	\$2.45
50kΩ	RP-8616	\$3.50	\$2.75	\$2.45

#### LINEAR SINGLE GANG (B)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
1kΩ	RP-8504	\$3.50	\$2.75	\$2.45
10kΩ	RP-8510	\$3.50	\$2.75	\$2.45
50kΩ	RP-8516	\$3.50	\$2.75	\$2.45
100kΩ	RP-8518	\$3.50	\$2.75	\$2.45
1MΩ	RP-8524	\$3.50	\$2.75	\$2.45

Suitable knobs are HK-7770/72 shown on page 124

#### LOG DOUBLE GANG (A)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
10kΩ	RP-8756	\$4.95	\$3.90	\$3.45
50kΩ	RP-8760	\$4.95	\$3.90	\$3.45

#### LINEAR DOUBLE GANG (B)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
10kΩ	RP-8706	\$4.95	\$3.90	\$3.45
50kΩ	RP-8710	\$4.95	\$3.90	\$3.45
100kΩ	RP-8712	\$4.95	\$3.90	\$3.45

### 16mm PCB MOUNTING

These pots have imperial standard shaft.

- Shaft is 1/4" D type (30% of shaft has been removed for flat), so they suit all our knob range
- Shaft length is 30mm
- Power rating Linear 0.125W and Log 0.06W
- Max operating voltage: 150VAC
- Supplied with nut and washer

#### LOG SINGLE GANG (A)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
1kΩ	RP-7604	\$2.50	\$2.05	\$1.75
10kΩ	RP-7610	\$2.50	\$2.05	\$1.75
50kΩ	RP-7616	\$2.50	\$2.05	\$1.75

#### LINEAR SINGLE GANG (B)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
1kΩ	RP-7504	\$2.50	\$2.05	\$1.75
5kΩ	RP-7508	\$2.50	\$2.05	\$1.75
10kΩ	RP-7510	\$2.50	\$2.05	\$1.75
50kΩ	RP-7516	\$2.50	\$2.05	\$1.75
100kΩ	RP-7518	\$2.50	\$2.05	\$1.75
1MΩ	RP-7524	\$2.50	\$2.05	\$1.75

#### LOG DOUBLE GANG (A)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
10kΩ	RP-7756	\$3.50	\$2.75	\$2.45

#### LINEAR DOUBLE GANG (B)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
50kΩ	RP-7708	\$3.50	\$2.75	\$2.45
100kΩ	RP-7712	\$3.50	\$2.75	\$2.45

### 24mm PCB MOUNTING

With imperial standard shaft & bushings made to our rigid engineering specifications. The potentiometers are full size - 24mm diameter types. They have genuine 6.35mm (1/4") shafts with a flat machined 25% of the diameter for grub screws or interference fit knob mounting. The shaft is a generous 38mm long. The bush is a 3/8" 32 T.H.D. type which we believe is necessary for good fixing to a panel. Another important feature of the pots is their PCB mount capability. The pins are rigidly mounted on phenolic with the centre pin offset from the two outer terminals. When soldered into a PCB, the pot is quite rigidly held on its own. Double gang pots are held in 6 places and require no extra mechanical mounting assistance. The pins are large enough to terminate screened cable, etc., if the job requires hard wiring.

- We have stocked this product for over 10 years now and have no intention of changing it. You can therefore confidently design around this product
- Supplied with nut and washer
- Power rating Log 0.25W and Linear 0.5W

#### LOG SINGLE GANG (A)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
1kΩ	RP-3604	\$2.95	\$2.40	\$2.00
5kΩ	RP-3608	\$2.95	\$2.40	\$2.00
10kΩ	RP-3610	\$2.95	\$2.40	\$2.00
25kΩ	RP-3614	\$2.95	\$2.40	\$2.00
50kΩ	RP-3616	\$2.95	\$2.40	\$2.00
100kΩ	RP-3618	\$2.95	\$2.40	\$2.00
250kΩ	RP-3620	\$2.95	\$2.40	\$2.00
500kΩ	RP-3622	\$2.95	\$2.40	\$2.00
1MΩ	RP-3624	\$2.95	\$2.40	\$2.00

#### LINEAR SINGLE GANG (B)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
500Ω	RP-3502	\$2.95	\$2.40	\$2.00
1kΩ	RP-3504	\$2.95	\$2.40	\$2.00
5kΩ	RP-3508	\$2.95	\$2.40	\$2.00
10kΩ	RP-3510	\$2.95	\$2.40	\$2.00
25kΩ	RP-3514	\$2.95	\$2.40	\$2.00
50kΩ	RP-3516	\$2.95	\$2.40	\$2.00
100kΩ	RP-3518	\$2.95	\$2.40	\$2.00
250kΩ	RP-3520	\$2.95	\$2.40	\$2.00
500kΩ	RP-3522	\$2.95	\$2.40	\$2.00
1MΩ	RP-3524	\$2.95	\$2.40	\$2.00

#### LOG DOUBLE GANG (A)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
10kΩ	RP-3756	\$4.50	\$3.60	\$3.15
50kΩ	RP-3760	\$4.50	\$3.60	\$3.15
100kΩ	RP-3762	\$4.50	\$3.60	\$3.15

#### LINEAR DOUBLE GANG (B)

VALUE	CAT.	Qty 1+	Qty 10+	Qty 50+
10kΩ	RP-3706	\$4.50	\$3.60	\$3.15
25kΩ	RP-3708	\$4.50	\$3.60	\$3.15
50kΩ	RP-3710	\$4.50	\$3.60	\$3.15
100kΩ	RP-3712	\$4.50	\$3.60	\$3.15

### 5Ω 15W WIREWOUND

SPECIFICATIONS	RP-3975
Resistance	5Ω
Resistance Curve	Linear (B)
Rated Wattage	15 Watts
Shaft	Spline (metric)
Body Measures	41mm OD x 24mm Depth
Shaft Length	20mm; 9.0mm hole required
Lugs	Solder Type
Total Rotation Angle	300° ±5°
Rotation Torque	70-400gf.cm
Stopper Strength	10kgf.cm

	CAT.	Qty 1+	Qty 10+	Qty 50+
	RP-3975	\$13.95	\$10.95	\$9.75

### POTENTIOMETER NUTS

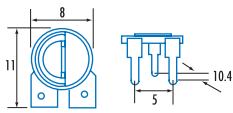
Packet of 12 nuts and washer to suit our pots.

		CAT.	Qty 1+	Qty 10+	Qty 50+
24mm	3/8" 32THD	RP-3500	\$3.50	\$2.75	\$2.45
16mm	Metric	RP-7500	\$3.50	\$2.75	\$2.45



## TRIMPOTS

### HORIZONTAL MINI TRIMPOTS OPEN CARBON TYPE



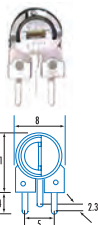
VALUE	CAT.	VALUE	CAT.
500Ω	RT-4304	20kΩ	RT-4314
1kΩ	RT-4306	50kΩ	RT-4316
2kΩ	RT-4308	100kΩ	RT-4318
5kΩ	RT-4310	200kΩ	RT-4320
10kΩ	RT-4312	500kΩ	RT-4324

CAT.	Qty 1+	Qty 25+	Qty 100+
All Types / Each	\$0.50	\$0.35	\$0.30

### VERTICAL TRIMPOTS 5MM OPEN CARBON TYPE

VALUE	CAT.	VALUE	CAT.
200Ω	RT-4006	50kΩ	RT-4020
500Ω	RT-4008	100kΩ	RT-4022
1kΩ	RT-4010	250kΩ	RT-4024
5kΩ	RT-4014	500kΩ	RT-4026
10kΩ	RT-4016	1MΩ	RT-4028
20kΩ	RT-4018	2MΩ	RT-4029

CAT.	Qty 1+	Qty 25+	Qty 100+
All Types / Each	\$0.50	\$0.35	\$0.30



### 25 TURN CERMET (3296W)

These are 25 turn industrial quality sealed trimpots. Pins are in a row, with 2.5mm spacing. Adjustment is vertical. Power rating is 0.5 watts.

VALUE	CAT.	VALUE	CAT.
100Ω	RT-4640	10kΩ	RT-4650
500Ω	RT-4642	20kΩ	RT-4652
1kΩ	RT-4644	50kΩ	RT-4654
2kΩ	RT-4646	100kΩ	RT-4656
5kΩ	RT-4648	1MΩ	RT-4658

CAT.	Qty 1+	Qty 25+	Qty 100+
All Types / Each	\$2.95	\$2.00	\$1.75

### MULTITURN CERMET (3006P)

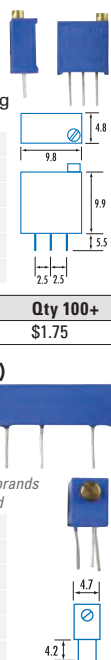
0.75 watts @ 70%.

Horizontal side adjustment.

• 15-20 turns

VALUE	CAT.	VALUE	CAT.
100Ω	RT-4602	10kΩ	RT-4614
500Ω	RT-4604	20kΩ	RT-4616
1kΩ	RT-4608	50kΩ	RT-4618
2kΩ	RT-4610	100kΩ	RT-4620
5kΩ	RT-4612	1MΩ	RT-4622

CAT.	Qty 1+	Qty 25+	Qty 100+
All Types / Each	\$1.95	\$1.35	\$1.15



### TRIMPOT CERMET 1 TURN 10KΩ (3386P)

- Single turn
- 10kΩ
- 10% tolerance

CAT.	Qty 1+	Qty 25+	Qty 100+
RT-4600	\$1.95	\$1.35	\$1.15

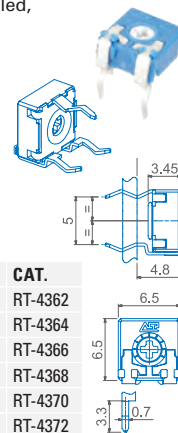
### PIHER STYLE HORIZONTAL 5MM

A range of top quality sealed, standard sized trimpots.

- Dust proof enclosure
- Polyester substrate
- Wiper positioned at 50%
- Accidental rotor movement protected
- Max voltage 100V / Nom power 0.1W
- Linear curve, Tolerance ±30%
- End resistance 10Ω carbon type

VALUE	CAT.	VALUE	CAT.
200Ω	RT-4350	20kΩ	RT-4362
500Ω	RT-4352	50kΩ	RT-4364
1kΩ	RT-4354	100kΩ	RT-4366
2kΩ	RT-4356	250kΩ	RT-4368
5kΩ	RT-4358	500kΩ	RT-4370
10kΩ	RT-4360	1MΩ	RT-4372

CAT.	Qty 1+	Qty 25+	Qty 100+
All Types / Each	\$1.35	\$0.90	\$0.80



## PROTOTYPE RESISTOR PACKS

### 0.25 WATT CARBON FILM RESISTORS 300 PIECES

This pack includes five of virtually each value from 1 Ω to 10 Meg. Sixty different values.

All resistors are banded for easy sorting.

Values supplied are:

1Ω, 1.5, 2.2, 3.3, 4.7, 5.6, 10, 12, 15, 22, 27, 33, 39, 47, 56, 68, 82, 100, 120, 180, 220, 270, 330, 470, 560, 680, 820, 1k, 1k2, 1k5, 1k8, 2k2, 3k3, 3k9, 4k7, 5k6, 8k2, 10k, 12k, 15k, 18k, 22k, 27k, 33k, 39k, 47k, 56k, 68k, 82k, 100k, 120k, 150k, 220k, 270k, 330k, 470k, 1M, 2M7, 4M7 & 10M.

CAT.	Qty 1+	Qty 25+	Qty 100+
RR-1680	\$8.95	\$6.25	\$5.25

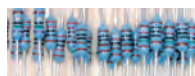


### 0.5W 1% MINI SIZE METAL FILM PACK

Pack includes five of each value from 10Ω to 1 Meg. Have that 1% resistor when you need it.

Five of each of the following values supplied. 10Ω, 12, 15, 22, 27, 33, 39, 47, 56, 68, 75, 82, 100, 120, 180, 220, 270, 330, 390, 470, 560, 680, 820, 910, 1k, 1k2, 1k8, 2k2, 3k3, 3k9, 4k7, 5k6, 6k8, 8k2, 10k, 12k, 15k, 18k, 22k, 27k, 33k, 39k, 47k, 56k, 68k, 82k, 91k, 100k, 120k, 150k, 180k, 200k, 220k, 270k, 330k, 390k, 470k, 560k, 750k & 1M. Total 60 values - 300 resistors. You know exactly what you are getting when you buy our resistor packs.

CAT.	Qty 1+	Qty 25+	Qty 100+
RR-0680	\$16.95	\$11.70	\$9.95



### ULTIMATE RESISTOR PACK

Top quality, guaranteed 1/4 watt 5% miniature sized carbon film. In fact, they look like 1/8W, they are so small. This pack gives you almost every resistor in the E24 range (eg. 1.8K, 2.0K, 2.2K). You get 10 of every value, a total of 170 values, 1700 resistors in all and they are banded for easy sorting. Buy this pack and you should NEVER be short of any resistor again. Massive savings over normal costs.

CAT.	Qty 1+	Qty 25+	Qty 100+
RR-2000	\$32.95	\$24.95	\$19.95



### 0.25 WATT CARBON FILM RESISTORS

This pack includes 10 of every value of 1/4W 5% carbon film resistors from 1Ω to 10MΩ.

This is the E12 range, which goes like this - 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82, 100. Total values supplied is 85, giving a total of 850 resistors. Resistors are banded for easy sorting. A great way to never be out of that odd resistor & save a packet at the same time.

CAT.	Qty 1+	Qty 25+	Qty 100+
RR-1697	\$16.95	\$11.70	\$9.95



## PROTOTYPE RESISTOR PACKS

## LIGHT DEPENDENT RESISTORS

### LIGHT DEPENDENT RESISTOR (LDR)

Cadmium sulphide (CdS) light dependent resistor cell.

#### SPECIFICATIONS RD-3485

Dark Resistance	0.5MΩ min.
Light Resistance	2.8kΩ min/8.4kΩ max.
Max Dissipation	100mW
Rise Time	(0-63%) 50mS
Decay Time	(100 - 37%) 40mS
Dimensions	8.5mm x 10.14mm
Lead Spacing	7.68mm

CAT.	Qty 1+	Qty 25+	Qty 100+
RD-3485	\$3.25	\$2.25	\$1.90



### LIGHT DEPENDENT RESISTOR (LDR)

Cadmium Sulphide (CdS) light dependent resistor cell. Similar to Philips ORP12.

#### SPECIFICATIONS RD-3480

Dark Resistance	min 10MΩ
Light Resistance	48k - 140kΩ
Max Dissipation	30mW
Rise Time	(0-63%) 40mS
Decay Time	(100-37%) 10mS
Dimensions	5.1mm x 4.3mm ±0.2
Lead Spacing	3.4mm

CAT.	Qty 1+	Qty 25+	Qty 100+
RD-3480	\$3.25	\$2.25	\$1.90



## OPEN AIR RESISTORS

### WELWYN OPEN AIR RESISTOR OAR3-R010FI OR010 3W 1%

A PCB mount current shunt/sense (resistor) up to about 20A. It is a very stable (extremely low temp drift), high tolerance (1%), low inductance (<10nH) shunt resistor that can be used in high current sense applications: motor current sense, regulated power supplies, power amplifier current sense, battery current sense. See website for datasheet. Sold individually

CAT.	Qty 1+	Qty 25+	Qty 100+
RR-3420	\$2.25	\$1.55	\$1.35

SPECIFICATIONS	RR-3420
Power	3W
Resistance	0.01Ω
Tolerance	±1%
Dimensions	15.2(L) x 25.4(H)mm



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!



## RESISTORS

	1% Metal A (1/2W)	5% Carbon B (1/4W)	5% Carbon C (1W)	5% W/wound D (5W)	5% W/wound E (10W)
0R0		RR-1500			
0R1				RR-3206	
0R22				RR-3208	
0R47				RR-3214	
0R75					
0R82					
1R0		RR-1502	RR-2502	RR-3220	RR-3340
1R2		RR-1504	RR-2504		
1R5		RR-1506	RR-2506	RR-3230	
1R8		RR-1508	RR-2508	RR-3232	
2R2		RR-1510	RR-2510	RR-3234	RR-3344
2R7		RR-1512	RR-2512	RR-3236	
3R3		RR-1514	RR-2514	RR-3238	RR-3346
3R9		RR-1516	RR-2516	RR-3240	RR-3347
4R7		RR-1518	RR-2518	RR-3242	RR-3348
5R6		RR-1520	RR-2520	RR-3244	RR-3349
6R8		RR-1522	RR-2522	RR-3246	RR-3350
8R2		RR-1524	RR-2524	RR-3248	RR-3351
10R	RR-0524		RR-2526	RR-3250	RR-3352
11R	RR-0525				
12R	RR-0526		RR-2528	RR-3252	RR-3353
13R	RR-0527				
15R	RR-0528		RR-2530	RR-3254	RR-3354
16R	RR-0529				
18R	RR-0530		RR-2532	RR-3256	RR-3355
20R	RR-0531				
22R	RR-0532		RR-2534	RR-3258	RR-3356
24R	RR-0533				
27R	RR-0534		RR-2536	RR-3260	RR-3357
30R	RR-0535				
33R	RR-0536		RR-2538	RR-3262	
36R	RR-0537				
39R	RR-0538		RR-2540	RR-3264	
43R	RR-0539				
47R	RR-0540		RR-2542	RR-3266	RR-3360
51R	RR-0541				
56R	RR-0542		RR-2544	RR-3268	
62R	RR-0543				
68R	RR-0544		RR-2546	RR-3270	RR-3362
75R	RR-0545				
82R	RR-0546		RR-2548	RR-3272	
91R	RR-0547				
100R	RR-0548		RR-2550	RR-3274	RR-3364
110R	RR-0549				
120R	RR-0550		RR-2552	RR-3276	
130R	RR-0551				
150R	RR-0552		RR-2554	RR-3278	
160R	RR-0553				
180R	RR-0554		RR-2556	RR-3280	
200R	RR-0555				
220R	RR-0556		RR-2558	RR-3282	
240R	RR-0557				
270R	RR-0558		RR-2760	RR-3284	RR-3369
300R	RR-0559				
330R	RR-0560		RR-2762	RR-3286	
360R	RR-0561				
390R	RR-0562		RR-2764	RR-3288	
430R	RR-0563				
470R	RR-0564		RR-2766	RR-3290	RR-3372
510R	RR-0565				
560R	RR-0566		RR-2768	RR-3292	
620R	RR-0567				
680R	RR-0568		RR-2770	RR-3294	
750R	RR-0569				
820R	RR-0570		RR-2772	RR-3296	RR-3375
910R	RR-0571				
1K0	RR-0572		RR-2774	RR-3298	
1K1	RR-0573				
1K2	RR-0574		RR-2776		
1K3	RR-0575				
1K5	RR-0576		RR-2778	RR-3302	
1K6	RR-0577				
1K8	RR-0578		RR-2780		
2K0	RR-0579				
2K2	RR-0580		RR-2782	RR-3306	
2K4	RR-0581				
2K7	RR-0582		RR-2784		
3K0	RR-0583				
3K3	RR-0584		RR-2786	RR-3310	
3K6	RR-0585				
3K9	RR-0586		RR-2788		
4K3	RR-0587				
4K7	RR-0588		RR-2790	RR-3312	

	1% Metal A (1/2W)	5% Carbon B (1/4W)	5% Carbon C (1W)
5K1	RR-0589		
5K6	RR-0590		RR-2792
6K2	RR-0591		
6K8	RR-0592		RR-2794
7K5	RR-0593		
8K2	RR-0594		RR-2796
9K1	RR-0595		
10K	RR-0596		RR-2798
11K	RR-0597		
12K	RR-0598		RR-2800
13K	RR-0599		
15K	RR-0600		RR-2802
16K	RR-0601		
18K	RR-0602		RR-2804
20K	RR-0603		
22K	RR-0604		RR-2806
24K	RR-0605		
27K	RR-0606		RR-2808
30K	RR-0607		
33K	RR-0608		RR-2810
36K	RR-0609		
39K	RR-0610		RR-2812
43K	RR-0611		
47K	RR-0612		RR-2814
51K	RR-0613		
56K	RR-0614		RR-2816
62K	RR-0615		
68K	RR-0616		RR-2818
75K	RR-0617		
82K	RR-0618		RR-2820
91K	RR-0619		
100K	RR-0620		RR-2822
110K	RR-0621		
120K	RR-0622		RR-2824
130K	RR-0623		
150K	RR-0624		RR-2826
160K	RR-0625		
180K	RR-0626		RR-2828
200K	RR-0627		
220K	RR-0628		RR-2830
240K	RR-0629		
270K	RR-0630		RR-2832
300K	RR-0631		
330K	RR-0632		RR-2834
360K	RR-0633		
390K	RR-0634		RR-2836
430K	RR-0635		
470K	RR-0636		RR-2838
510K	RR-0637		
560K	RR-0638		RR-2840
620K	RR-0639		
680K	RR-0640		RR-2842
750K	RR-0641		
820K	RR-0642		RR-2844
910K	RR-0643		
1M0	RR-0644		RR-2846
1M2		RR-1650	RR-2848
1M5		RR-1652	RR-2850
1M8		RR-1654	
2M2		RR-1656	RR-2854
2M7		RR-1658	
3M3		RR-1660	RR-2858
3M9		RR-1662	RR-2860
4M7		RR-1664	RR-2862
5M6		RR-1666	RR-2864
6M8		RR-1668	
8M2		RR-1670	RR-2868
10M	RR-0660	RR-1672	RR-2870

### A: 0.5W 1% METAL FILM MINI SIZE

Same size as standard 1/4W Carbon Film.



	Qty 1+	Qty 25+	Qty 100+
Pkt 8	\$0.55	\$0.39	\$0.33

### B: 0.25W CARBON FILM

5%, available from 1Ω to 8.2Ω & 1.2MΩ to 10MΩ. Use Mini Metal Film for other values.



	Qty 1+	Qty 25+	Qty 100+
Pkt 8	\$0.48	\$0.34	\$0.29

### C: 1W CARBON FILM 5%



	Qty 1+	Qty 25+	Qty 100+
Pkt 2	\$0.48	\$0.34	\$0.29

### D: 5W WIREWOUND

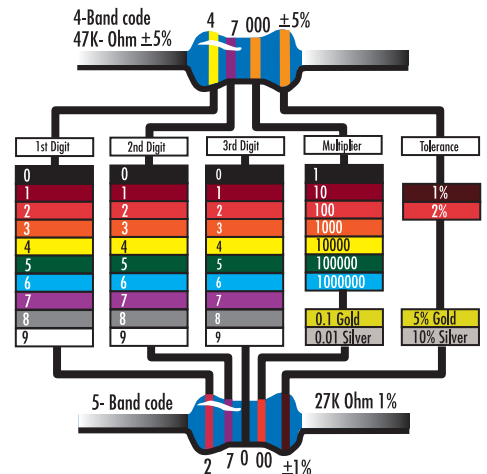
5WR1J

	Qty 1+	Qty 25+	Qty 100+
Each	\$0.48	\$0.34	\$0.29

### E: 10W WIREWOUND

10W

	Qty 1+	Qty 25+	Qty 100+
Each	\$1.80	\$1.25	\$1.05



BUY A LOT OF RESISTORS?

Check out our economical pack deals on page 126

### Powering an LED?

See page 104 for our selection guide.



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**Visit Our Online Store:**  
[www.jaycar.com.au](http://www.jaycar.com.au)



# Electromechanical & Enclosures



## ELECTROMECHANICAL

Buzzers	161
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## ENCLOSURES

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## Mechanical Ventilation (Fans):

Suitable for computers, office machinery, appliances, copying machines, power units, amplifiers, automatic vending machines, air conditioning, medical equipment etc.

- Long life - 60,000 hours @ 25°C, 30,000 hours @ 40°C
- Ball bearing: 100,000 hours @ 25°C
- Can be mounted on suction or discharge side
- Wiring will not burn out even if rotating parts are restricted



ON ALL OF OUR FANS

WARRANTY



## Choose Your Model: Fans

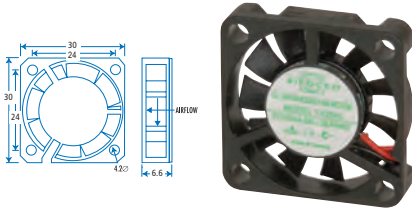
	Size (mm)	Depth (mm)	Operating Volt	Bearing Type	Air Volume (CFM)	Speed (RPM)	Connection	Housing	Tacho	Page
<b>5VDC AXIAL FAN</b>										
YX-2500	30	6	5VDC	Ball	108	8,000	Flylead	Plastic	No	129
<b>12VDC AXIAL FANS</b>										
YX-2501	30	6	12VDC	Ball	108	8,000	Flylead	Plastic	No	129
YX-2503	40	10	12VDC	Sleeve	5.4	6,000	Flylead	Plastic	No	129
YX-2502	40	20	12VDC	Sleeve	7.6	7,000	Flylead	Plastic	No	129
XC-5054	40	10	12VDC	Ball	5.4	6,000	Flylead & Plug	Plastic	Yes	129
YX-2504	50	15	12VDC	Sleeve	16.6	5,500	Flylead	Plastic	No	129
XC-5055	50	10	12VDC	Ball	11.6	5,500	Flylead & Plug	Plastic	Yes	129
YX-2505	60	25.4	12VDC	Sleeve	20	4,000	Flylead	Plastic	No	129
YX-2512	80	25.4	12VDC	Sleeve	34	3,000	Flylead	Plastic	No	129
YX-2513	80	25.4	12VDC	Ball	34	3,000	Flylead	Plastic	No	130
YX-2523	80	25.4	12VDC	Ball	42	3,100	Flylead	Plastic	No	130
YX-2580 *	80	25	12VDC	Magnetic	28.1	2,000	Flylead	Polycarbonate	No	130
YX-2570 *	80	25	12VDC	Ball	20.7	1,600	3 Pin Molex	Polycarbonate	No	131
YX-2521	90	25	12VDC	Sleeve	59	3,000	Flylead	Plastic	No	130
YX-2582 *	92	25	12VDC	Magnetic	39.8	2,000	Flylead	Polycarbonate	No	130
YX-2572 *	92	25	12VDC	Ball	31.3	1,500	3 Pin Molex	Polycarbonate	No	131
YX-2518	120	25.4	12VDC	Ball	88	3,000	Flylead	Plastic	No	130
YX-2522	120	25	12VDC	Ball	88	3,000	Flylead	Plastic	No	130
YX-2584 *	120	25	12VDC	Magnetic	64.3	1,500	Flylead	Polycarbonate	No	130
YX-2574 *	120	25	12VDC	Ball	37	1,000	3 Pin Molex	Polycarbonate	No	131
<b>12VDC BLOWER FANS</b>										
YX-2532	97 x 94	33	12VDC	Ball	26	3,600	Flylead	Plastic	No	131
<b>24VDC AXIAL FAN</b>										
YX-2542	80	25.4	24VDC	Ball	40	3,200	Flylead	Plastic	No	131
<b>240VAC AXIAL FANS</b>										
YX-2509	80	25.4	240VAC	Sleeve	23	2,800	Flylead	Metal	No	131
YX-2510	80	38	240VAC	Sleeve	30	2,800	Flylead	Metal	No	131
YX-2508	80	38	240VAC	Ball	30	2,800	Flylead	Metal	No	131
YX-2516	120	25.4	240VAC	Sleeve	80	2,350	Solder	Metal	No	132
YX-2514	120	38	240VAC	Sleeve	105	3,000	Solder	Metal	No	132
YX-2517	120	38	240VAC	Ball	105	3,000	Solder	Metal	No	132
YX-2520	150	55	240VAC	Ball	230	3,400	Use PS-4160	Metal	No	132

Note: Fans with \* on page 130 are not Sirocco brand and have specific technical data. Please refer to that page. All 240V rated fans work equally well on 230V mains.

## 5V/12VDC FANS:

- Housing / Impeller: Plastic GRP Filled
- Connections: Flylead

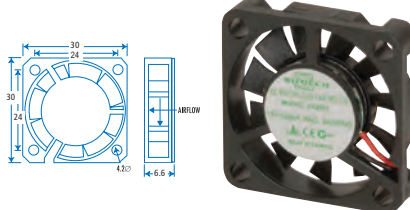
### 5VDC 30MM NARROW - 2 WIRE



SPECIFICATIONS	YX-2500
Voltage (V)	5VDC
Current (mA)	120
Dimensions (mm)	30 x 30 x 6
Air Volume (m³/min)	3.1
Air Volume (CFM)	108
Speed (RPM)	8000
Noise (dBA)	27
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
30mm	YX-2500	\$13.95	\$12.35	\$10.95

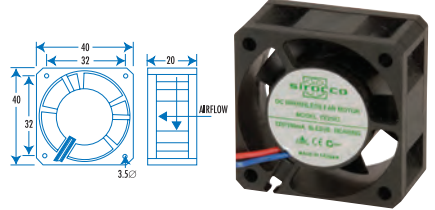
### 12VDC 30MM NARROW - 2 WIRE



SPECIFICATIONS	YX-2501
Voltage (V)	12VDC
Current (mA)	100
Dimensions (mm)	30 x 30 x 6
Air Volume (m³/min)	3.1
Air Volume (CFM)	108
Speed (RPM)	8000
Noise (dBA)	27
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
30mm	YX-2501	\$13.95	\$12.35	\$10.95

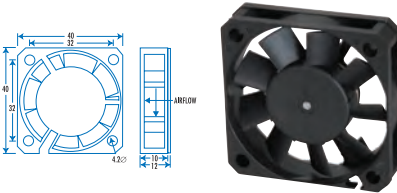
### 40MM - 2 WIRE



SPECIFICATIONS	YX-2502
Voltage (V)	12VDC
Current (mA)	100
Dimensions (mm)	40 x 40 x 20
Air Volume (m³/min)	0.215
Air Volume (CFM)	7.6
Speed (RPM)	7000
Noise (dBA)	32
Bearing System	Sleeve

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
40mm	YX-2502	\$19.95	\$17.70	\$15.70

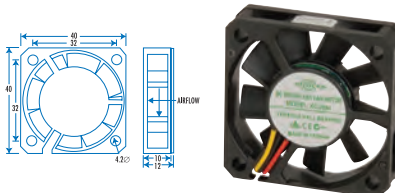
### 40MM NARROW - 2 WIRE



SPECIFICATIONS	YX-2503
Voltage (V)	12VDC
Current (mA)	80
Dimensions (mm)	40 x 40 x 10
Air Volume (m³/min)	0.16
Air Volume (CFM)	5.4
Speed (RPM)	6000
Noise (dBA)	30
Bearing System	Sleeve

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
40mm	YX-2503	\$16.95	\$14.95	\$13.35

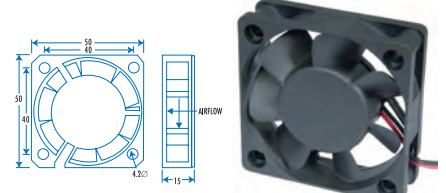
### 40MM BALL BEARING - 3 WIRE



SPECIFICATIONS	XC-5054
Voltage (V)	12VDC
Current (mA)	80
Dimensions (mm)	40 x 40 x 10
Air Volume (m³/min)	0.16
Air Volume (CFM)	5.4
Speed (RPM)	6000
Noise (dBA)	30
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
40mm	XC-5054	\$15.95	\$14.35	\$12.75

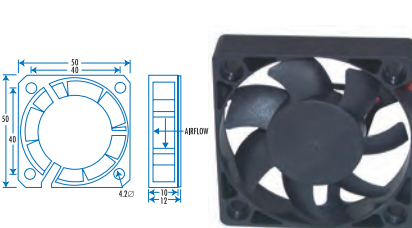
### 50MM NARROW - 2 WIRE



SPECIFICATIONS	YX-2504
Voltage (V)	12VDC
Current (mA)	190
Dimensions (mm)	50 x 50 x 15
Air Volume (m³/min)	0.7
Air Volume (CFM)	16.6
Speed (RPM)	5500
Noise (dBA)	33
Bearing System	Sleeve

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
50mm	YX-2504	\$17.95	\$15.95	\$14.35

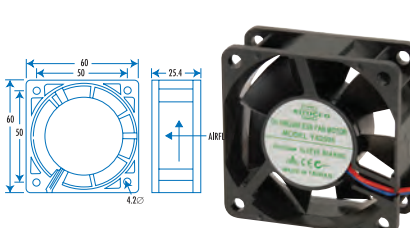
### 50MM BALL BEARING - 3 WIRE



SPECIFICATIONS	XC-5055
Voltage (V)	12VDC
Current (mA)	130
Dimensions (mm)	50 x 50 x 15
Air Volume (m³/min)	0.33
Air Volume (CFM)	11.6
Speed (RPM)	5500
Noise (dBA)	31
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
50mm	XC-5055	\$15.95	\$14.35	\$12.75

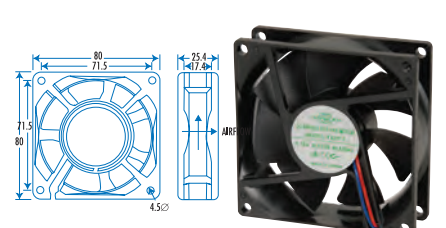
### 60MM - 2 WIRE



SPECIFICATIONS	YX-2505
Voltage (V)	12VDC
Current (mA)	130
Dimensions (mm)	60 x 60 x 25.4
Air Volume (m³/min)	0.57
Air Volume (CFM)	20
Speed (RPM)	4000
Noise (dBA)	30
Bearing System	Sleeve

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
60mm	YX-2505	\$17.95	\$15.95	\$14.35

### 80MM - 2 WIRE



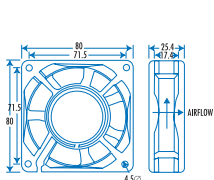
SPECIFICATIONS	YX-2512
Voltage (V)	12VDC
Current (mA)	200
Dimensions (mm)	80 x 80 x 25.4
Air Volume (m³/min)	0.97
Air Volume (CFM)	34
Speed (RPM)	3000
Noise (dBA)	32
Bearing System	Sleeve

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2512	\$17.95	\$15.95	\$14.35



## 12VDC FANS (CONTINUED)

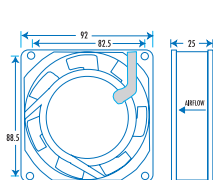
### 80MM BALL BEARING - 2 WIRE



SPECIFICATIONS	YX-2513
Voltage (V)	12VDC
Current (mA)	200
Dimensions (mm)	80 x 80 x 25.4
Air Volume (m³/min)	0.97
Air Volume (CFM)	34
Speed (RPM)	3000
Noise (dBA)	32
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2513	\$19.95	\$17.70	\$15.70

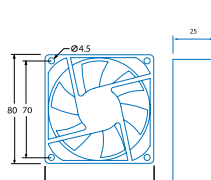
### 90MM - 2 WIRE



SPECIFICATIONS	YX-2521
Voltage (V)	12VDC
Current (mA)	320
Dimensions (mm)	90 x 90 x 25
Air Volume (m³/min)	1.67
Air Volume (CFM)	59
Speed (RPM)	3000
Noise (dBA)	36
Bearing System	Sleeve

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
90mm	YX-2521	\$19.95	\$17.70	\$15.70

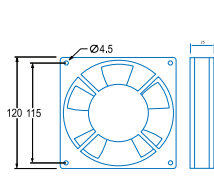
### 80MM BALL BEARING - IP55



SPECIFICATIONS	YX-2523
Voltage (V)	12VDC
Current (mA)	200
Dimensions (mm)	80 x 80 x 25.4
Air Volume (m³/min)	1.2
Air Volume (CFM)	42
Speed (RPM)	3100
Noise (dBA)	35
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2523	\$24.95	\$22.35	\$19.70

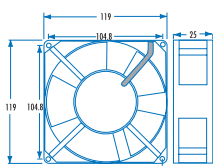
### 120MM BALL BEARING - IP55



SPECIFICATIONS	YX-2522
Voltage (V)	12VDC
Current (mA)	380
Dimensions (mm)	120 x 120 x 25
Air Volume (m³/min)	3
Air Volume (CFM)	88
Speed (RPM)	3000
Noise (dBA)	42
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
120mm	YX-2522	\$36.95	\$33.45	\$29.45

### 120MM NARROW BALL BEARING - 2 WIRE



SPECIFICATIONS	YX-2518
Voltage (V)	12VDC
Current (mA)	360
Dimensions (mm)	120 x 120 x 25.4
Air Volume (m³/min)	2.3
Air Volume (CFM)	88
Speed (RPM)	3000
Noise (dBA)	42
Bearing System	Ball

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
120mm	YX-2518	\$28.95	\$25.95	\$22.95

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## 12VDC MAGLEV FANS

### SUPER LONG-LIFE LOW-NOISE MAGLEV BEARING CASE FANS

Featuring a patented Nanoflux bearing that incorporates magnetic levitation (maglev) technology and precise manufacturing, these premium quality fans ensure an extremely long operational life of 100,000hrs at 40°C (even longer at 25°C). Not only does the unique self-lubricating maglev bearing design offer extremely long life, but also extremely low noise levels compared to traditional fans

- Voltage: 12VDC (5VDC Starting Voltage)
- Black: Earth, Red: 12V+, Yellow: Tacho output (1 pulse/rev)
- Bearings: Nanoflux magnetic levitation
- Housing: Polycarbonate
- Impellers: UV reactive polycarbonate
- Connections: Flylead - 3 pin molex

SPECIFICATIONS	YX-2580	YX-2582	YX-2584
Current (mA)	100	180	220
Dimensions (mm)	80 x 80 x 25	92 x 92 x 25	120 x 120 x 25
Air Volume (m³/min)	0.8	1.13	1.82
Air Volume (CFM)	28.1	39.8	64.3
Speed (RPM)	2000	2000	1500
Noise (dBA)	21	22.5	25

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2580	\$24.95	\$22.35	\$19.70
90mm	YX-2582	\$29.95	\$26.90	\$23.70
120mm	YX-2584	\$34.95	\$31.45	\$27.90

ball bearings, and also offers the ability for the fan impeller to be removed for cleaning. The fan impeller itself has a winglet tip design and is UV reactive. Rubber fan mounts are also included to eliminate fan motor vibrations entering the case, further reducing noise levels. Dust/waterproof to IP54, these fans are sure to last even in harsh conditions.



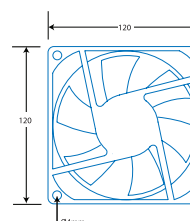
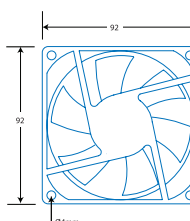
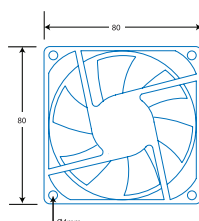
YX-2580



YX-2582



YX-2584



## 12VDC HYDRODYNAMIC FANS

### SILENT HYDRODYNAMIC BEARING CASE FANS

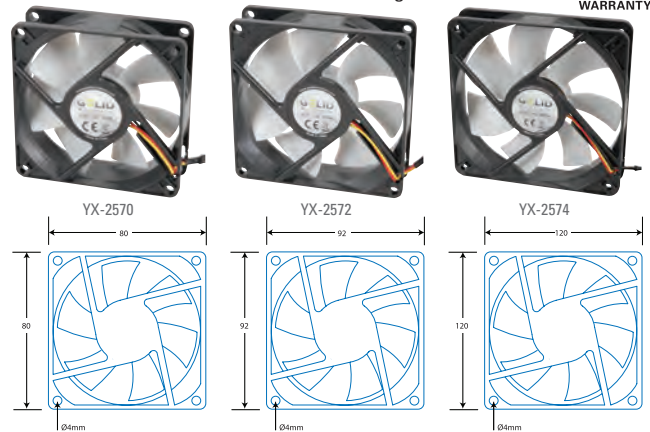
Designed to provide additional airflow without increasing noise levels these fans have precisely balanced blades and long-life hydrodynamic bearing. Ultra-low noise making these fans perfect for a home theatre PC, or ventilating the amplifier wedged into your entertainment unit. To further improve silence, rubber fan mounts are included to eliminate fan motor vibrations inducing vibration noise.

- Voltage: 12VDC
- Rated to last for 50,000 hours at 40°C (more at 25°C)
- Bearings: Ball (hydrodynamic)
- Housing / Impellers: Polycarbonate
- Connections: Flylead - 3 pin molex

**1 YEAR**  
WARRANTY

SPECIFICATIONS	YX-2570	YX-2572	YX-2574
Current (mA)	80	130	80
Dimensions (mm)	80 x 80 x 25	92 x 92 x 25	120 x 120 x 25
Air Volume (m³/min)	0.59	0.89	1.05
Air Volume (CFM)	20.7	31.3	37
Speed (RPM)	1600	1500	1000
Noise (dBA)	18	20	20.2

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2570	\$19.95	\$17.70	\$15.70
90mm	YX-2572	\$24.95	\$22.35	\$19.70
120mm	YX-2574	\$28.95	\$25.95	\$22.95

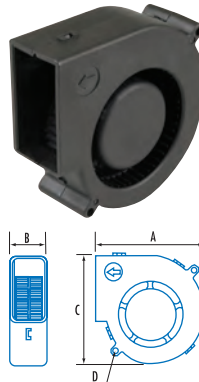


## 12VDC BLOWER FAN

### 97MM X 94MM BLOWER FAN BALL BEARING - 2 WIRE

Ideal for applications where space is limited but high air volume is required.

A=97MM  
B=33MM  
C=94MM



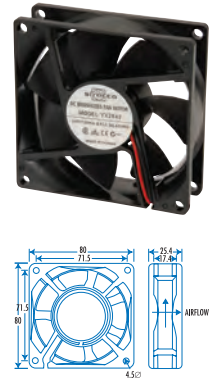
SPECIFICATIONS	YX-2532
Voltage (V)	12VDC
Current (mA)	860
Dimensions (mm)	97 x 94 x 33
Air Volume (m³/min)	0.74
Air Volume (CFM)	26
Speed (RPM)	3600
Noise (dBA)	51
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

VOLTAGE	SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
12VDC	97x94mm	YX-2532	\$29.95	\$26.90	\$23.70

## 24VDC FANS

### 80MM NARROW BALL BEARING VERSION - 2 WIRE

Life expectancy 100,000 hours @ 25°C.



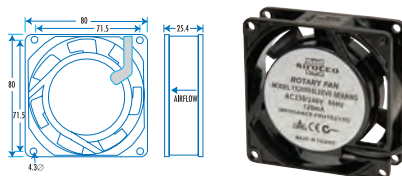
SPECIFICATIONS	YX-2542
Voltage (V)	24VDC
Current (mA)	130
Dimensions (mm)	80 x 80 x 25.4
Air Volume (m³/min)	1.1
Air Volume (CFM)	40
Speed (RPM)	3200
Noise (dBA)	35
Bearing	Ball
Housing	Plastic, fibreglass filled
Impeller	Plastic, fibreglass filled
Connections	Flylead

VOLTAGE	SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
24VDC	80mm	YX-2542	\$29.95	\$26.90	\$23.70

## 240VAC FANS

- Voltage (V): 240VAC
- Impeller: Plastic, fibreglass filled

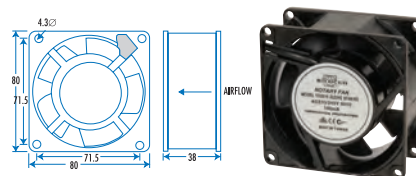
### 80MM NARROW - 2 WIRE



SPECIFICATIONS	YX-2509
Current (mA)	120
Dimensions (mm)	80 x 80 x 25.4
Air Volume (m³/min)	0.67
Air Volume (CFM)	23
Speed (RPM)	2800
Noise (dBA)	33
Bearing	Sleeve
Housing - Diecast	Diecast zinc, aluminium
Connections	Flylead
Other	-

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2509	\$29.95	\$26.90	\$23.70

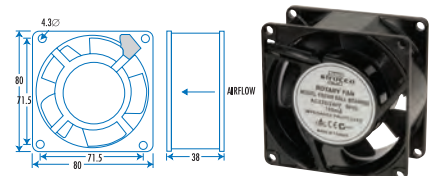
### 80MM STANDARD - 2 WIRE



SPECIFICATIONS	YX-2510
Current (mA)	80
Dimensions (mm)	80 x 80 x 38
Air Volume (m³/min)	0.88
Air Volume (CFM)	30
Speed (RPM)	2800
Noise (dBA)	35
Bearing	Sleeve
Housing - Diecast	Aluminium, powdercoated
Connections	Flylead
Other	-

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2510	\$29.95	\$26.90	\$23.70

### 80MM BALL BEARING - 2 WIRE



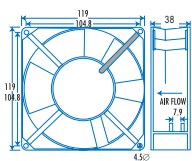
SPECIFICATIONS	YX-2508
Current (mA)	100
Dimensions (mm)	80 x 80 x 38
Air Volume (m³/min)	0.88
Air Volume (CFM)	30
Speed (RPM)	2800
Noise (dBA)	32
Bearing	Ball
Housing - Diecast	Aluminium, powdercoated
Connections	Flylead
Other	Life - 100,000 hrs@25°C

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2508	\$36.95	\$33.45	\$29.45

## ▼ 240VAC FANS (CONTINUED)

- Voltage (V): 240VAC
- Impeller: Plastic, fibreglass filled
- Housing Diecast: Aluminium

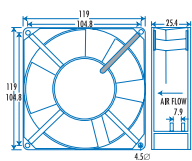
## 120MM - SOLDER LUGS



SPECIFICATIONS	YX-2514
Current (mA)	125
Dimensions (mm)	120 x 120 x 38
Air Volume (m <sup>3</sup> /min)	3
Air Volume (CFM)	105
Speed (RPM)	3000
Noise (dBA)	47
Bearing	Sleeve
Connections	Solder Lugs
Other	Life - 100,000 hrs @25°C

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
120mm	YX-2514	\$28.95	\$25.95	\$22.95

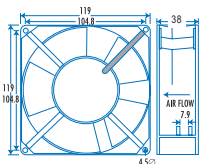
## 120MM NARROW - SOLDER LUGS



SPECIFICATIONS	YX-2516
Current (mA)	120
Dimensions (mm)	120 x 120 x 25.4
Air Volume (m³/min)	2.3
Air Volume (CFM)	80
Speed (RPM)	2350
Noise (dBA)	44
Bearing	Sleeve
Connections	Solder Lugs
Other	Life - 100,000 hrs@25°C

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
120mm	YX-2516	\$29.95	\$26.90	\$23.70

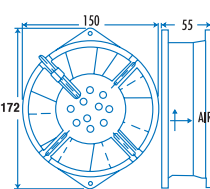
## 120MM BALL BEARING - SOLDER LUGS



SPECIFICATIONS	YX-2517
Current (mA)	125
Dimensions (mm)	120 x 120 x 38
Air Volume (m³/min)	3
Air Volume (CFM)	105
Speed (RPM)	3000
Noise (dBA)	47
Bearing	Ball
Connections	Solder lugs
Other	Life - 100,000 hrs@25°C

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
120mm	YX-2517	\$36.95	\$33.45	\$29.45

## 150MM BALL BEARING - 2 WIRE



SPECIFICATIONS	YX-2520
Current (mA)	290
Dimensions (mm)	150 x 172 x 55
Air Volume (m <sup>3</sup> /min)	6.57
Air Volume (CFM)	230
Speed (RPM)	3400
Noise (dBA)	53
Bearing	Ball
Connections	Flylead
Other	Life - 100,000 hrs@25°C

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	YX-2520	\$84.95	\$76.50	\$67.95

▼ **FAN ACCESSORIES**

## FAN POWER LEAD

- Suits YX-2514, YX-2516 & YX-2517

Use with our 240VAC fans with two lugs for power connection. Moulded plug to suit fan one end, and bare wires at the other.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.2m	PS-4160	\$3.95	\$3.45	\$3.15

## PLASTIC FAN GUARD / FILTER KITS

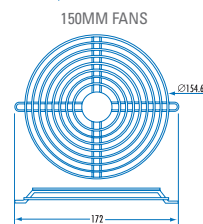
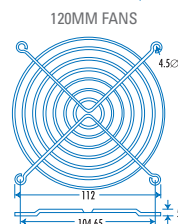
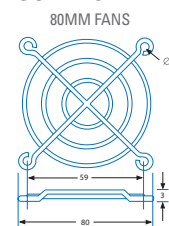
Foam filter prevents dust particles entering the fan. Rated to UL 94V-0.

- We recommend periodic cleaning of the foam filter to prevent clogging and restricting air flow
- Available in 3 sizes



WIDTH	CAT.	Qty 1+	Qty 4+	Qty 10+
60mm	YX-2550	\$6.95	\$6.25	\$5.50
80mm	YX-2552	\$6.95	\$6.25	\$5.50
120mm	YX-2554	\$7.95	\$6.95	\$6.25

## FAN FINGER GUARDS



WIDTH	CAT.	Qty 1+	Qty 4+	Qty 10+
80mm	YX-2511	\$3.95	\$3.45	\$3.15
120mm	YX-2515	\$4.95	\$4.45	\$3.90
150mm	YX-2525	\$8.95	\$7.95	\$6.95



## Smart Hardware Competition:

- ADAM HAYES,  
SHOPS AT JAYCAR WAGGA WAGGA

"Just made a start on this portable Power pack/  
stereo"

## Tech Talk: Regarding Power Transformers

In the early days of electricity (mid-late nineteenth century) when Thomas Edison was credited with the invention of the light bulb, he felt that DC (direct current) was the way to go to distribute power around the country. An employee, Nikola Tesla, however, disagreed. He realised, for good technical reasons that AC was technically superior. One of the main reasons for this, is that you cannot use a transformer to convert one DC voltage to another. This is easily done, of course, with a transformer for AC. The transformer has now been with us for almost 150 years and is one of the most useful electrical components ever invented. Thank you Mr. Tesla for prevailing. Jaycar proudly carries an extensive range of these humble but essential products.

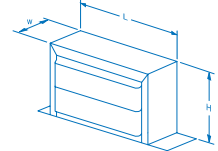
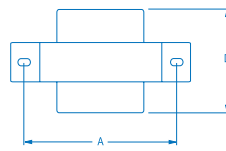
**FIND OUT MORE IN STORE**  
Our staff offer friendly and helpful service.



## Select Your Model: Quick Reference Transformer Selection

Magnetic core technology for mains transformers has been stable for many years. This is not to say that manufacturing technology has not improved. Our range of transformers may be stable, but that does not mean that our products don't change. We are constantly refining these transformers. We have two major categories Power EI Core and Power Toroidals. This table gives an overview with key technical specifications for easy reference and selection.

- Primary Voltage (V): 240VDC
- Primary Connection: 200mm Fly Leads
- Primary internal thermal fuse protection
- Conforms to AS/NZ 61558.2.6



### POWER EI CORE

			SECONDARY				CONNECTION		DIMENSIONS (MM)						
	TYPE	VA	VOLTAGE (V)	CURRENT (A)	WINDING	REGULATION (%)	PRIMARY	SECONDARY	A	D	L	W	H	(KG)	PAGE
MM-2017	2840	1.35	9, 4, 5	150mA	Centre Tapped	9	Fly Leads	Fly Leads	45	32	37	16	32	0.120	133
MM-2018	2854	3.6	24, 12	150mA	Centre Tapped	12	Fly Leads	Fly Leads	53	41	43	22	36	0.230	133
MM-2006	2851	1.9	12.6, 6.3	150mA	Centre Tapped	8	Fly Leads	Fly Leads	46	32	37	16	32	0.112	133
MM-2007	2855	4.5	30, 15	150mA	Centre Tapped	8	Fly Leads	Fly Leads	53	44	43	28	36	0.280	134
MM-2013	2853	7	12.6, 6.3	500mA	Centre Tapped	10	Fly Leads	Fly Leads	61	38	51	20	43	0.310	134
MM-2002	2155	15	15, 12.6, 9.5, 8.5, 7.5, 6.3	1A	Multi-Tapped	10	Fly Leads	Solder Lugs	72	52	59	32	51	0.665	134
MM-2008	6672	30	30, 27.5, 24, 20, 17.5, 15	1A	Multi-Tapped	11	Fly Leads	Solder Lugs	85	62	69	35	59	0.924	134
MM-2005	2165	60	30, 24, 21, 18, 15, 12, 9	2A	Multi-Tapped	8	Fly Leads	Solder Lugs	85	65	69	35	59	0.995	134
MM-2011	2154	18	18, 15, 12	1A	Multi-Tapped	8	Fly Leads	Solder Lugs	72	56	59	32	51	0.650	134
MM-2014	2167L	60	(12, 9) (x2)	2.5A (x2)	Multi-Tapped/Dual	10	Fly Leads	Solder Lugs	82	76	69	48	59	1.30	134
MM-2004	2156	30	15, 12, 9, 6	2A	Multi-Tapped	10	Fly Leads	Solder Lugs	82	60	69	35	59	0.92	134
MM-2012	2158	72	24	3A	Single	9	Fly Leads	Fly Leads	82	76	69	48	59	1.30	135
MM-2015	2170	100	(15, 12) (x2)	3A (x2)	Multi-Tapped/Dual	7	Fly Leads	Solder Lugs	91	76	80	44	68	1.60	135

Note 1: All EI Core Transformer Fly Leads 200mm

Note 2: The dual winding models can be connected in parallel to obtain twice the output current. The windings must be connected in phase.

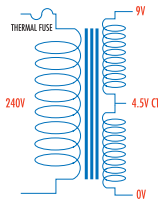
### POWER TOROIDALS

		SECONDARY				CONNECTION		DIMENSIONS (MM)			(KG)	PAGE NO.
	VA	VOLTAGE (V)	CURRENT (A)	WINDING	REGULATION (%)	PRIMARY	SECONDARY	OD	ID	H		
MT-2082	20	9 (x2)	1.11A (x2)	Dual	14	Fly Leads	Fly Leads	75	27	32	0.51	135
MT-2084	20	12 (x2)	0.83A (x2)	Dual	14	Fly Leads	Fly Leads	75	27	32	0.51	135
MT-2086	20	15 (x2)	0.66A (x2)	Dual	15	Fly Leads	Fly Leads	75	27	32	0.51	135
MT-2112	160	12 (x2)	6.66A (x2)	Dual	10	Fly Leads	Fly Leads	110	34	44	1.80	135

Note 1: All Toroidal Transformer Fly Leads 150mm.

Note 2: The secondary windings can be connected in parallel to obtain twice the output current. The windings must be connected in phase.

#### 9V, 1.35VA, 150MA CENTRE TAPPED TYPE 2840

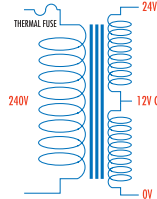


1.35VA, Max 150mA

SPECIFICATIONS	MM-2017
Type	2840
Secondary winding (s)	Centre Tapped
Total VA rating	1.35VA
Secondary Voltages	9V, 4.5V (CT)
Secondary Current (max)	150mA
Magnetising Current	30mA
Temp rise above ambient at rated power	60°C
Regulation	9%
Weight	120g
Secondary Connection	200mm Fly leads
Dimensions (mm)	A45, D32, L37, W16, H32

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
9V	MM-2017	\$7.95	\$6.95	\$6.25

#### 24V, 3.6VA, 150MA CENTRE TAPPED TYPE 2854

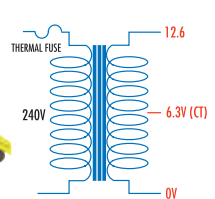


3.6VA, Max 150mA

SPECIFICATIONS	MM-2018
Type	2854
Secondary winding (s)	Centre Tapped
Total VA rating	3.6VA
Secondary Voltages	24V, 12V (CT)
Secondary Current (max)	150mA
Magnetising Current	40mA
Temp rise above ambient at rated power	65°C
Regulation	12%
Weight	230g
Secondary Connection	200mm Fly leads
Dimensions (mm)	A53, D41, L43, W22, H36

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
24V	MM-2018	\$8.95	\$7.95	\$6.95

#### 12.6V CT, 1.9VA, 150MA CENTRE TAPPED TYPE 2851



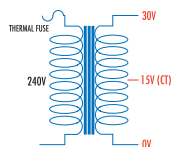
1.9VA, Max 150mA

SPECIFICATIONS	MM-2006
Type	2851
Secondary winding (s)	Centre Tapped
Total VA rating	1.9VA
Secondary Voltages	12.6V, 6.3V (CT)
Secondary Current (max)	150mA
Magnetising Current	15mA
Temp rise above ambient at rated power	40°C
Regulation	8%
Weight	112g
Secondary Connection	200mm Fly leads
Dimensions (mm)	A46, D32, L37, W16, H32

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
12.6V	MM-2006	\$7.95	\$6.95	\$6.25

## ▼ TRANSFORMERS (CONTINUED)

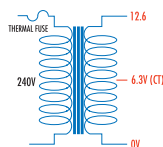
### 30V CT, 4.5VA, 150MA CENTRE TAPPED TYPE 2855



SPECIFICATIONS	MM-2007
Type	2855
Secondary Winding(s)	Centre Tapped
Total VA Rating	4.5VA
Secondary Voltages	30V, 15V(CT)
Secondary Current (max)	150mA
Magnetising Current	40mA
Temp Rise Above Ambient At Rated Power	40°C
Regulation	8%
Weight	280g
Secondary Connection	200mm Fly leads
Dimensions (mm)	A53, D44, L43, W28, H36

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
30V	MM-2007	\$8.95	\$7.95	\$6.95

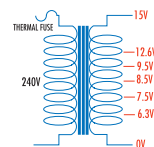
### 12.6V CT, 7VA, 500MA CENTRE TAPPED TYPE 2853



SPECIFICATIONS	MM-2013
Type	2853
Secondary Winding(s)	Centre Tapped
Total VA Rating	7VA
Secondary Voltages	12.6V, 6.3V(CT)
Secondary Current (max)	500mA
Magnetising Current	40mA
Temp Rise Above Ambient At Rated Power	40°C
Regulation	10%
Weight	310g
Secondary Connection	200mm Fly leads
Dimensions (mm)	A61, D38, L51, W20, H43

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
12.6V	MM-2013	\$9.95	\$8.75	\$7.75

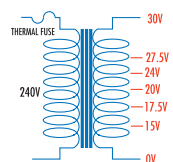
### 6.3 - 15V, 15VA, 1A MULTI-TAPPED TYPE 2155



SPECIFICATIONS	MM-2002
Type	2155
Secondary Winding(s)	Multi-Tapped
Total VA Rating	15VA
Secondary Voltages	15V, 12.6V, 9.5V, 8.5V, 7.5V(CT), 6.3V(CT)
Secondary Current (max)	1A
Magnetising Current	30mA
Temp Rise Above Ambient At Rated Power	45°C
Regulation	10%
Weight	665g
Secondary Connection	Solder lugs
Dimensions (mm)	A72, D52, L59, W32, H51

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
6.3-15V	MM-2002	\$11.95	\$10.70	\$9.50

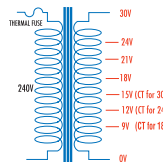
### 15 - 30V, 30VA, 1A MULTI-TAPPED TYPE 6672



SPECIFICATIONS	MM-2008
Type	6672
Secondary Winding(s)	Multi-Tapped
Total VA Rating	30VA
Secondary Voltages	30V, 27.5V, 24V, 20V, 17.5V, 15V(CT)
Secondary Current (max)	1A
Magnetising Current	40mA
Temp Rise Above Ambient At Rated Power	60°C
Regulation	11%
Weight	924g
Secondary Connection	Solder lugs
Dimensions (mm)	A85, D62, L69, W35, H59

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
15-30V	MM-2008	\$18.95	\$16.95	\$14.95

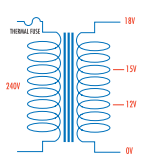
### 9 - 30V, 60VA, 2A MULTI-TAPPED TYPE 2165



SPECIFICATIONS	MM-2005
Type	2165
Secondary Winding(s)	Multi-Tapped
Total VA Rating	60VA
Secondary Voltages	30V, 24V, 21V, 18V, 15V(CT), 12V(CT), 9V(CT)
Secondary Current (max)	2A
Magnetising Current	60mA
Temp Rise Above Ambient At Rated Power	60°C
Regulation	8%
Weight	955g
Secondary Connection	Solder lugs
Dimensions (mm)	A85, D65, L69, W35, H59

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
9-30V	MM-2005	\$27.95	\$24.95	\$22.35

### 12V - 18V, 18VA, 1A MULTI-TAPPED TYPE 2154

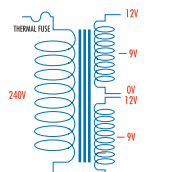


SPECIFICATIONS	MM-2011
Type	2154
Secondary Winding(s)	Multi-Tapped
Total VA Rating	18VA
Secondary Voltages	18V, 15V, 12V
Secondary Current (max)	1A
Magnetising Current	40mA
Temp Rise Above Ambient At Rated Power	60°C
Regulation	8%
Weight	650g
Secondary Connection	Solder lugs
Dimensions (mm)	A72, D56, L59, W32, H51

VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
12-18V	MM-2011	\$11.95	\$10.70	\$9.50

### 9V - 24V, 60VA, 5A MULTI-TAPPED/DUAL TYPE 2167L

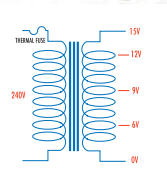
SPECIFICATIONS	MM-2014
Type	2167L
Secondary Winding(s)	Multi-Tapped/ dual
Total VA Rating	60VA
Secondary Voltages	12V, 9V (x2)
Secondary Current (max)	2.5A (x2)
Magnetising Current	65mA
Temp Rise Above Ambient At Rated Power	65°C
Regulation	10%
Weight	1300g
Secondary Connection	Solder lugs
Dimensions (mm)	A82, D76, L69, W48, H59



VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
9-24V	MM-2014	\$27.95	\$24.95	\$22.35

### 6 - 15V, 30VA, 2A MULTI-TAPPED TYPE 2156

SPECIFICATIONS	MM-2004
Type	2156
Secondary Winding(s)	Multi-Tapped
Total VA Rating	30VA
Secondary Voltages	15V, 12V, 9V, 6V(CT)
Secondary Current (max)	2A
Magnetising Current	60mA
Temp Rise Above Ambient At Rated Power	60°C
Regulation	10%
Weight	920g
Secondary Connection	Solder lugs
Dimensions (mm)	A82, D60, L69, W35, H59

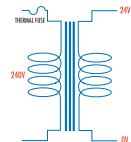


VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
6-15V	MM-2004	\$18.95	\$16.95	\$14.95

## ▼ TRANSFORMERS (CONTINUED)

### 24V, 72VA, 3A SINGLE WINDING TYPE 2158

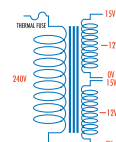
SPECIFICATIONS	MM-2012
Type	2158
Secondary Winding(s)	Single
Total VA Rating	72VA
Secondary Voltages	24V
Secondary Current (max)	3A
Magnetising Current	60mA
Temp Rise Above Ambient At Rated Power	65°C
Regulation	10%
Weight	1300g
Secondary Connection	200mm Fly leads
Dimensions (mm)	A82, D76, L69, W48, H59



VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
24V	MM-2012	\$27.95	\$24.95	\$22.35

### 12V - 30V, 100VA, 6A MULTI-TAPPED/DUAL TYPE 2170

SPECIFICATIONS	MM-2015
Type	2170
Secondary Winding (s)	Multi-Tapped/dual
Total VA Rating	100VA
Secondary Voltages	15V, 12V(x2)
Secondary Current (max)	3A (x2)
Magnetising Current	80mA
Temp Rise Above Ambient At Rated Power	70°C
Regulation	7%
Weight	1600g
Secondary Connection	Solder lugs
Dimensions (mm)	A91, D76, L80, W44, H68



VOLTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
12-30V	MM-2015	\$29.95	\$26.95	\$23.95

## Toroidals:

**SCANAR**

### WHY A TOROID?

- Smaller size and weight to meet modern 'slimline' requirements
- Low electrically induced noise demanded by compact equipment
- High efficiency enabling conservative rating whilst maintaining size advantages
- Simple, quick, single bolt mounting

The Toroidal transformer is now accepted as the standard in the industry, quality made to ISO 9000 overtaking the obsolete laminated type. Industry has been quick to recognise the advantage toroidals offer in size, weight and lower radiated field.

Current ratings on toroidal transformers. Can be used in 2 ways:

- Both secondary windings in series - double the volts
- Both secondary windings in parallel - double the amps.

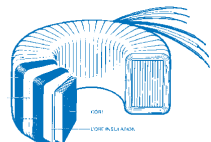
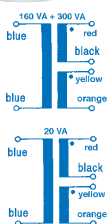
Note: If connected in parallel, the windings must be connected in phase.

**20VA LOW PROFILE:** MT-2082 / MT-2084 / MT-2086

- Dimensions: 75(O/D) x 27(I/D) x 32(H)mm
- The height is only 32mm, which means they will fit into a 44mm rack case.

**160VA TOROIDS:** MT-2112

- Dimensions: 110(O/D) x 34(I/D) x 44(H)mm



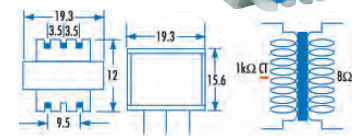
CAT.		SECONDARY SERIES	SECONDARY PARALLEL
MT-2082	9+9V	1.11A	2.22A
MT-2084	12+12V	0.833A	1.66A
MT-2086	15+15V	0.666A	1.333A
MT-2112	12+12V	6.66A	13.33A

	CAT.	Qty 1+	Qty 2+	Qty 4+
9V 20VA	MT-2082	\$29.95	\$26.95	\$23.95
12V 20VA	MT-2084	\$24.95	\$22.45	\$19.95
15V 20VA	MT-2086	\$24.95	\$22.45	\$19.95
12V 160VA	MT-2112	\$54.95	\$49.45	\$43.90

## ▼ MINIATURE TRANSFORMERS

### MINIATURE TRANSFORMER STANDARD

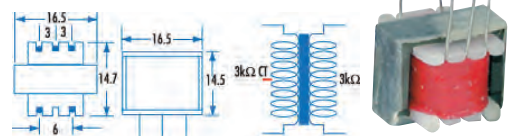
- Primary/secondary 1k  $\Omega$  ct/8  $\Omega$
- 350mW rating



	CAT.	Qty 1+	Qty 2+	Qty 4+
Standard	MM-2532	\$4.95	\$4.45	\$3.90

### MINIATURE COUPLING TRANSFORMER

- 3k  $\Omega$  CT//3k
- Iron core



	CAT.	Qty 1+	Qty 2+	Qty 4+
Miniature	MM-2534	\$4.95	\$4.45	\$3.90

## ▼ SPEAKER TRANSFORMER

### 5W LINE SPEAKER TRANSFORMER

Designed to tap 100V (or 70V 1/2 power) public address amplifier lines to use an 8 $\Omega$  speaker. Made with grain oriented steel for good frequency response. Good dynamic range. Primary taps enable you to select power level for 8 $\Omega$  speaker. Connect primary to C (100V) and tap for whatever sound level is required from 0.5-5WRMS. Supplied with terminal block mounted on top of transformer. Mounting hole centres 53mm.

PRIMARY	POWER
20k	0.5W
10k	1W
5k	2W
2.5k	5W



	CAT.	Qty 1+	Qty 2+	Qty 4+
	MM-1900	\$10.95	\$9.75	\$8.75

## ▼ STROBE GLOBE & TRIGGER

### MINIATURE STROBE TRIGGER TRANSFORMER

Used to trigger small XENON discharge lamps.

- Can be used with SL-2692 Strobe Tube
- Dimensions: 10(L) x 7( $\phi$ )mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
	MM-2520	\$1.95	\$1.75	\$1.55

### XENON REPLACEMENT GLOBE

Suits common party strobe lights with a Xenon tube. Can be used with MM-2520 Trigger Transformer.

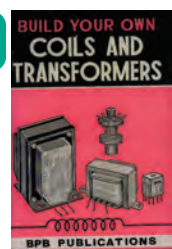


- Design power: 6W
- Max voltage: 550V
- Design voltage: 500V
- Min voltage: 200V
- Min trigger voltage: 210V
- Flash frequency: 0.4 - 4Hz
- Sec trigger voltage: 6kV
- Lifespan: Up to 3 million flashes
- Glass dimensions: 32(H) x 5(Dia.)mm

	CAT.	Qty 1+	Qty 10+	Qty 25+
	SL-2692	\$5.95	\$5.35	\$4.75

## BUILD YOUR OWN COILS AND TRANSFORMERS BOOK

This book is a wealth of information, ideal for hobbyist or anybody interested in winding their own transformers. After the introduction the book covers attributes of coils/transformers, mutual inductance, reactance, resonance, impedance, coil selectivity. It then goes on to the design aspects - discussing coils in tuning circuits, types of formers and cores, types of winding, self capacity, equations, coil design, design of IF transformers then output and power transformers. 55 pages 137 x 212mm.



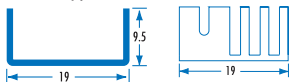
	CAT.	Qty 1+
	BM-2440	\$7.95



## HEATSINKS & ACCESSORIES

### TO-220 MINI (6073B TYPE)

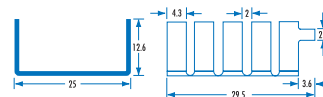
- Equivalent to popular 6073 type



THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
20°C/W	HH-8502	\$0.85	\$0.75	\$0.65

### TO-220 (6021 TYPE)

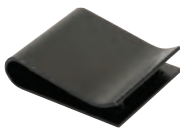
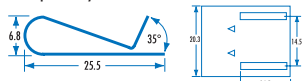
- Solderable PCB mounting pins



THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
12°C/W	HH-8504	\$1.45	\$1.30	\$1.15

### TO-220 CLIP-ON (6043 TYPE)

The heatsink will just clip over a device when required for permanent or temporary installation.

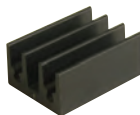
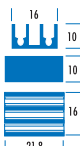


THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
30°C/W	HH-8503	\$1.20	\$1.05	\$0.95

### TO-220

These PCB mount heatsinks have two 'screw flute' channels to aid in fastening to a board or surface.

- 16(W) x 21.8(D) x 10(H)mm

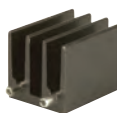


THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
30°C/W	HH-8514	\$1.75	\$1.55	\$1.40

### TO-220

Same dimensions as our HH-8514 only with longer fins. These PCB mount heatsinks have two tinned pins to aid in fastening the sink to a board or surface.

- 16(W) x 21.8(D) x 15.8(H)mm
- Pins 2mm dia. x 3mm long



THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
19°C/W	HH-8516	\$1.55	\$1.35	\$1.20

### PC MOUNT TO-3P

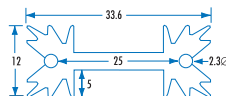
Will accept up to TO-3P size flat pack transistors. (This includes TO-220). Includes 2 PC pins, which help stabilise the heatsink and allow you to solder to PCB pads.

#### 25MM HIGH (6098 TYPE)

- Size 33.6(W) x 12(D) x 25(H)mm
- Cat. HH-8520

#### 40MM HIGH (6099 TYPE)

- Size 33.6(W) x 12(D) x 40(H)mm
- Cat. HH-8522

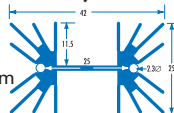


THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
17°C/W	HH-8520	\$1.55	\$1.35	\$1.20
11°C/W	HH-8522	\$2.65	\$2.30	\$1.95

### HEAVY DUTY TO-3P (ML97 TYPE)

Heavy duty version of the heatsinks described above.

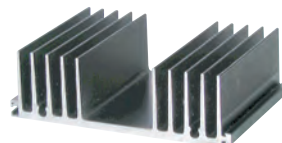
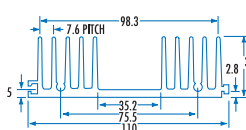
- Solderable screw studs
- Size 42(W) x 25(D) x 38(H)mm



THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
7.5°C/W	HH-8526	\$2.75	\$2.45	\$2.15

## VERSATILE HEAVY DUTY

- Allows horizontal & vertical mounting
- Length 72mm
- Undrilled

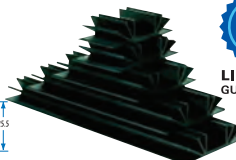
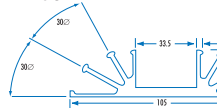


THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
2.2°C/W	HH-8566	\$14.95	\$13.35	\$11.70

## HIGH EFFICIENCY FAN TYPE

Available in various lengths.

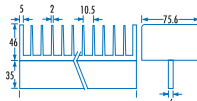
- 105mm wide



LENGTH	THERMAL RESIST.	CAT.	Qty 1+	Qty 4+	Qty 10+
55mm	2.5°C/W	HH-8570	\$5.95	\$5.25	\$4.75
72mm	2.2°C/W	HH-8572	\$8.95	\$7.95	\$6.95
135mm	1.1°C/W	HH-8573	\$11.95	\$10.70	\$9.50

## DIECAST

- Dimensions: 150(L) x 75(H) x 46(D)mm

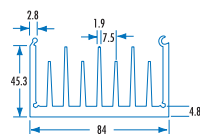


THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
No Bracket 1.2°C/W	HH-8555	\$19.95	\$17.95	\$15.95

## FAN ASSISTED-TYPE HEATSINK

This heatsink is designed to mate with itself to form a tunnel. The heatsink extrusion has a screw flute centre to enable 4 x No.6 self-tapping screws to fasten an 80mm standard type fan on one (or both) end/s to drive air through the heatsink assembly. It is ideal for high power amplifiers and power supplies. The entire assembly, including fan/s can still fit inside a 2 x Rackunit (88mm) enclosure. The heatsink also features ribbed fins for extra surface area, a 4mm thick base to enable thread tapping and small vee grooves on 5mm centres to facilitate mounting hole location. The centre groove, for example, is directly below the middle fin.

- Two standard lengths are available, black anodised



Suitable fans are YX-2512 (12VDC) or YX-2510 (240VAC).  
Note: Two heatsinks pictured.

THERMAL CHARACTERISTICS				
Assembly Type	Cooling Mode	Rating (approx)		
Single Length	Convection	0.83°C/W		
Tunnel Assembly	Convection	0.70°C/W		
Tunnel Assembly	Fan Assisted (single)	0.35°C/W		
Tunnel Assembly	Fan Assisted (dual)	0.30°C/W		

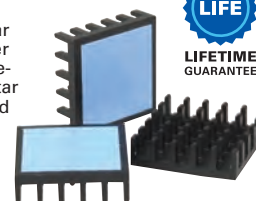


LENGTH (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
225	HH-8530	\$24.95	\$22.35	\$19.70
254	HH-8532	\$27.95	\$24.95	\$22.35

## HEATSINK PIN GRID ARRAY WITH ADHESIVE THERMAL TRANSFER TAPE

This heatsink makes a perfect partner to Star LED modules. It doesn't get quicker or easier than this! Just peel the backing from the pre-mounted thermal transfer tape, press the Star LED (or whatever device) to the heatsink and SHAZAM!! It's ready to go! Don't be fooled by the compact size. The "pin grid array" design provides excellent low thermal resistance and heat dissipation. Sold individually.

- Dimensions: 21(L) x 21(W) x 6.2(H)mm

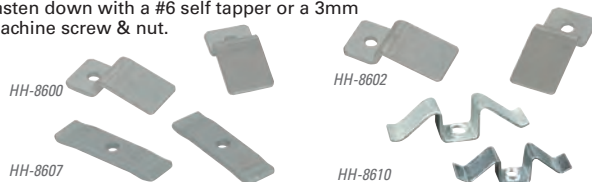


THERMAL RESISTANCE	CAT.	Qty 1+	Qty 4+	Qty 10+
5.9°C/W	HH-8580	\$3.25	\$2.90	\$2.60

## HEATSINKS & ACCESSORIES (CONTINUED)

### TRANSISTOR CLAMPS

To clamp (TO-220) devices to a heatsink. Fasten down with a #6 self tapper or a 3mm machine screw & nut.



	CAT.	Qty 1+	Qty 10+	Qty 50+
Single TO-220 Transistor Clamps Pk 10	HH-8600	\$8.95	\$7.95	\$6.95
Single TO-220 Transistor Clamps Pk 100	HH-8602	\$24.95	\$22.35	\$19.70
Dual TO-220 Transistor Clamps Pk 100	HH-8607	\$19.95	\$17.70	\$13.70
Dual TO-220 Transistor Clamps ea	HH-8610	\$1.45	\$1.30	\$1.15

For really high current fuses and fuse holders see page 408

### 25% SILVER HEATSINK COMPOUND - 1.5 GRAM TUBE

Contains 25% Silver for more efficient heat transfer. Ready to use syringe. Please note that Silver Heatsink Compound does conduct electricity and care should be taken when being used.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5g Tube	NM-2013	\$5.95	\$5.25	\$4.75

### HEATSINK COMPOUND - 3G SYRINGE WITH APPLICATOR

Features Nano Diamond for high thermal conductivity. It is electrically insulated so that you can apply to all electronic components and IC's and protects from short circuits.

- Instant conductivity
- Complete insulation
- Thermal conductivity: >3.8W/m-K
- Thermal resistance: <0.087°C-in 2/W
- Specific resistance: >2.4
- Operating temperature: -50°C-240°C



	CAT.	Qty 1+	Qty 4+	Qty 10+
3g Tube	NM-2018	\$7.95	\$7.15	\$6.25

### HEATSINK COMPOUND - ADHESIVE

Non electrically conductive. One 5 gram tube will adhere up to 16TO-3 package transistors.



	CAT.	Qty 1+	Qty 4+	Qty 10+
5g Tube	NM-2014	\$7.95	\$6.95	\$6.25

### HEATSINK COMPOUND

Heat conducting paste facilitates heat transfer from semiconductors to heatsinks. One 10g tube will do up to 30 TO-3 package transistors.

- Non electrically conductive



	CAT.	Qty 1+	Qty 4+	Qty 10+
10g Tube	NM-2010	\$3.95	\$3.45	\$3.15
50g Syringe	NM-2011	\$9.95	\$8.75	\$7.75
150g Tube	NM-2012	\$19.95	\$17.70	\$15.70

### THERMAL TRANSFER TAPE 100 X 100 X 0.5MM - PKT 2

When it comes to attaching devices like star LED modules to heatsinks, it's often not easy because they don't have screw 'eyes' like a TO220 transistor package. Using this thermal transfer tape, it's a breeze. The material is self adhesive and provides good thermal conductivity making it easy for chipsets, LED modules, memory modules etc. 2pcs of 100mm x 100mm sheets supplied. Just cut to size. 0.5mm thickness.

SPECIFICATIONS	NM-2790
Thermal Conductivity	1.6 W/m-k
Flammability Level	UL94V-0
Working Temperature Range	-60 ~ +250°C
Insulation Strength	>7,000V/mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	NM-2790	\$12.95	\$11.35	\$10.35

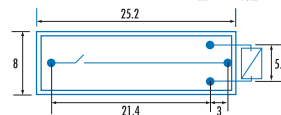
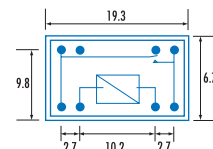
## RELAYS PCB MOUNT

### DUAL-IN-LINE REED STYLE RELAYS

They will fit into a 14 pin IC socket, are highly sensitive and can be driven by TTL, etc. Both are SPST normally open.



ALLOWABLE VOLTAGE = 160%



SPECIFICATIONS	SY-4030	SY-4032	SY-4036	SY-4038
Coil Resistance	500Ω	1000Ω	500Ω	1050Ω
Nominal Voltage	5V	12V	5V	12V
Rated Current	10mA	12mA	20mA	11.4mA
Pickup Voltage	3.75VDC	9.0VDC	3.5VDC	8.4VDC
Dropout Voltage	0.8VDC	1.0VDC	0.5VDC	1.2VDC
Power Consumption (W)	-	-	0.1	0.1
Contact Rating	0.5A	0.5A	1A	1A

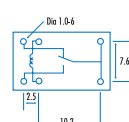
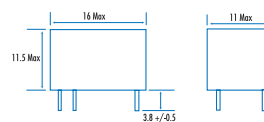
VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
5VDC	10mA	SPST	SY-4030	\$4.75	\$4.15	\$3.75
12VDC	12mA	SPST	SY-4032	\$4.75	\$4.15	\$3.75
5VDC	20mA	SPST	SY-4036	\$3.95	\$3.45	\$3.15
12VDC	11.4mA	SPST	SY-4038	\$3.95	\$3.45	\$3.15

## STANDARD COIL / CONTACT RELAYS

### DIL TYPE - 6V 1A MINI

- Extra low profile. 6VDC bobbin
- 56 ohm coil resistance
- 1A / 125VAC
- PCB mount

- Contact rating: 1 Amp
- SPDT
- Dimensions: 15 x 11 x 11(H)mm

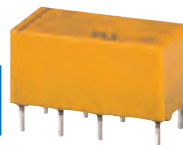
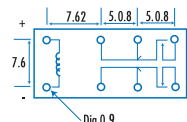
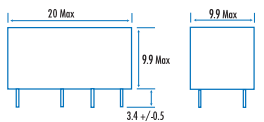


VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
125VAC	1A	SPDT	SY-4058	\$7.95	\$6.95	\$6.25

### DIL TYPE - 12V 5A MINI

- 12 volt DPDT relay
- 12VDC coil (polarised)
- Max switching power 60W
- Dimensions: 20 x 10 x 10(H)mm
- High sensitivity 200mW pickup power

- Coil resistance 720 ohm
- 125VA
- PCB mount



Note: Coil is polarised.

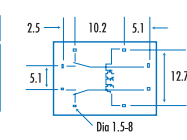
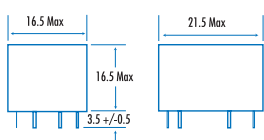
Product may vary from the one shown.

VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	5A	DPDT	SY-4059	\$9.95	\$8.75	\$7.75

### 12V 1A DPDT

- Rated voltage - 12VDC
- Coil resistance - 400 ohm
- Dimensions: 21(W) x 16(D) x 15(H)mm

- Coil current - 30mA
- Contact rating: 1 Amp



VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	1A	DPDT	SY-4061	\$5.95	\$5.35	\$4.75





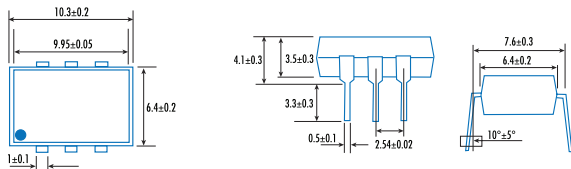
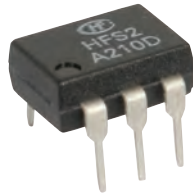
## Solid State Relays:

Solid state relays are particularly useful when only low switching currents are available, such as those presented by CMOS or TTL circuits. Optically isolated for optimum safety, the relays feature high surge ratings to allow lamp and motor switching plus zero voltage turn-on and zero current turn off to minimise EMI and RFI emissions. Use this relay in conjunction with our remote control switches for safe 240VAC mains switching.

### PCB MOUNT SOLID STATE DIL RELAY

Able to be triggered from low currents, and a super small package. Low on resistance and very low quiescent current.

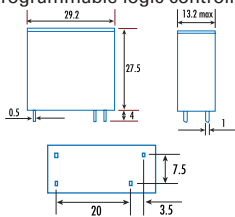
SPECIFICATIONS	SY-4090
Must Release Current	0.4mA
Must Operate Current	5mA
Maximum Load Voltage	60VDC
Maximum Load Current	150mA
Package	6 pin DIL



VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
5V	500mA	SY-4090	\$4.95	\$4.45	\$3.90

### PCB MOUNT SOLID STATE RELAYS, LOW CURRENT

Low profile PCB mounting solid state relays with LED input status indication. Suitable for applications such as I/O interfaces and programmable logic controllers.



SY-4092



SY-4093

SPECIFICATIONS	SY-4092	SY-4093
Control Voltage Range	4 - 6VDC	9.6 - 14.4VDC
Max. Input Current	20mA	20mA
Load Voltage	3 - 52.8VDC	3 - 50VDC
Load Current	0.01 - 2A	0.01 - 2A

Will only switch off if DC power interrupted.

VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
5VDC	2A	SY-4092	\$7.95	\$7.15	\$6.35
12VDC	2A	SY-4093	\$7.95	\$7.15	\$6.35

### MAINS TYPE

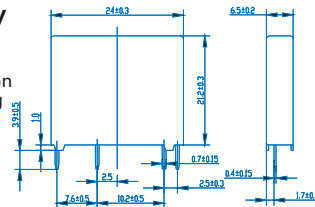
SPECIFICATIONS - OUTPUT	SY-4080
Max Load Current	3A
Nominal Line Voltage	240VAC
Load Voltage Range	24-280VAC
Min. Blocking Voltage	600VAC
Max One-Cycle Surge Current	80A
Min. Load Current	50mA
AC Current	3A max
INPUT	
Control Voltage	3-32VDC
Control Current	15mA Max
Min. Turn Off Voltage	1VDC
Input Resistance	2.2kΩ min



VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
3-32VDC	3A	SY-4080	\$19.95	\$17.95	\$15.95

### SLIM 5V, 12V

- Ultra slim
- 2A switching
- Photo isolation
- 600V blocking voltage
- Sealed type



SY-4088

SPECIFICATIONS	5VDC (SY-4088)	12VDC (SY-4089)
Dielectric Strength	20000VAC (1 minute)	20000VAC (1 minute)
Insulation Resistance	100MΩ (at 500VDC)	100MΩ (at 500VDC)
Operating Temperature	-30°C to +80°C	-30°C to +80°C
INPUT RATINGS		
Control Voltage	4-6 VDC	9.6 - 14.4 VDC
Maximum Current	15mA	15mA
Voltage On	4V	4V
Current Off	1V	1V
OUTPUT RATINGS		
Voltage (AC Power)	50 - 250VAC	50 - 250VAC
Maximum Current	2A	2A
Surge Current	30A	30A

VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
5VDC	2A	SY-4088	\$6.95	\$6.25	\$5.50
12VDC	2A	SY-4089	\$6.95	\$6.25	\$5.50

### CHASSIS MOUNT SOLID STATE RELAYS, HIGH CURRENT

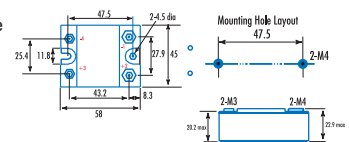
Both look similar but are in fact quite different.

#### SY-4084 40A, 240VAC TRIAC TYPE

This unit has a dielectrically isolated D.C. control input that controls a 40amp TRIAC. This means that you can control AC mains up to 40A RMS. It also means that it will not control D.C. For that you need the SY-4086 below.

#### Specifications for SY-4084

- Dielectric isolation rating 4000VAC
- Opto isolated control, 4V min, 32V max (D.C.)
- TRIAC controlled AC out. 48-280VAC
- Built-in snubber
- RoHS compliant



#### SY-4086 100A, 0-30VDC MOSFET TYPE

This unit has a dielectrically isolated D.C. control input to switch a MOSFET which can control loads of up to 100A @ 30VDC. It will not switch AC. To switch AC use the SY-4084. NB: Mechanical details same for both units. Advantages of SY-4086. Switching high current D.C. was previously accomplished by high current contactors. Contactors quickly as they are plagued by arcing of the actual contacts. There is no arcing with MOSFETs and their very low ON-resistance (in this case 3.5 milli Ω) ensures little wasted energy.

Fast recovery diode\*



DC Output Solid State Relay Schematic.

\*The diode is required to prevent back EMF problems with inductive loads. The diode should be a fast recovery type with a PIV rating greater the VDC Power Supply.

#### HEATSINK TO SUIT SY-4084/SY-4086

Using this heat sink with the SY-4084/SY-4086 solid state relays assures you reach the full current capacity. Solid state relays become quite hot when used in a high current application is essential. Datasheet available on our website.

- Thermal resistance - 1.1°C/W
- Dimensions - 118(W) x 110(L) x 64 (H)mm



SY-4085

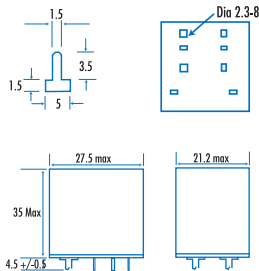
VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC (ONLY)	40A	SY-4084	\$49.95	\$44.95	\$39.95
30VDC	100A	SY-4086	\$49.95	\$44.95	\$39.95
CAT.	QTY 1+	QTY 10+	QTY 25+		
Heatsink to suit	SY-4085	\$19.95	\$17.95	\$15.95	

## CRADLE RELAYS

### CRADLE RELAY - DPDT

PCB or DIN mount relays. Available in 12V or 24V configuration.

- Relay 24VDC 10A
- Coil current: 58mA
- Contact resistance: 50 milliohms
- Must operate voltage: 19.2VDC
- Coil resistance: 650Ω (SY-4007) 160Ω (SY-4008)
- Rated coil voltage: 24VDC
- Contact rating: 10A (resistive load)
- Operate time: 25ms max
- Operational life: 20 million cycles
- Suitable base: SY-4064

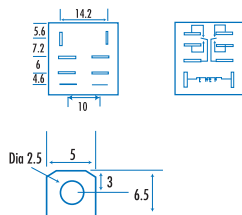


VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	10A	DPDT	SY-4008	\$7.95	\$6.95	\$6.25
24VDC	10A	DPDT	SY-4007	\$7.95	\$6.95	\$6.25

### CRADLE RELAY - DPDT

For heavy current switching for mains appliances eg. high power speakers.

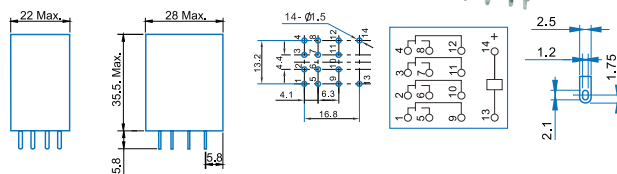
- Contact rated at 10A 240VAC
- Coil 12VDC 160 ohms
- Suitable base: Use SY-4064 cradle
- NO/NC contacts
- DPDT contacts
- Dimensions: 27(W) x 20(D) x 35(H)mm



VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	10A	DPDT	SY-4065	\$7.95	\$6.95	\$6.25

### CRADLE RELAY - 4PDT

- Rated Voltage: 12VDC
- Coil Resistance: 180Ω
- Contact Rating: 5A NO/NC contacts
- 27(W) x 21(D) x 35(H)mm excl pins
- Suitable base: SY-4004



VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	5A	4PDT	SY-4009	\$9.95	\$8.75	\$7.75

### DIN RAIL MOUNT RELAY SOCKET

DIN rail mounting base for SY-4009. Also has 4mm holes so can be screw mounted to a chassis.

- Dimensions: 71(L) x 29(W) x 30(H)mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Suits SY-4009	SY-4004	\$6.95	\$6.25	\$5.55

### CRADLE RELAY BASE

Quality DIN rail mount with screw terminals.

- Suits SY-4065
- Dimensions: 72(W) x 29(D) x 30(H)mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
Suits SY-4065	SY-4064	\$5.95	\$5.35	\$4.75

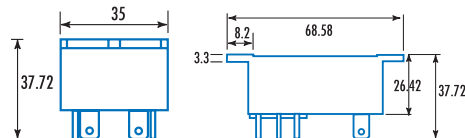
## Panel/Chassis Mount Relays:

All feature rugged construction and quick connect terminals for easy installation.

### 24VDC OR 240VAC, DPDT, 30A

Two models available. One with a nominal 240VAC coil and one with 24VDC coil.

- Contact Form: DPDT
- Contact Rating: 30A NO / 3A NC
- 24V Model Coil Resistance: 350 ohm
- 240V Model Coil Resistance: 3800 ohm @50Hz

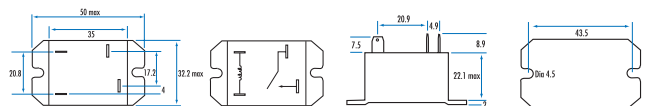


VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
24VDC	30A	DPDT	SY-4041	\$21.95	\$19.75	\$17.75
240VAC	30A	DPDT	SY-4044	\$24.95	\$22.50	\$19.95

### 12VDC, SPST 30A

- Contact Rating: 30A/240V
- QC tab termination - 4.8mm coil, 6.4mm contacts
- Used in heavy duty applications like air conditioning, heating etc
- Coil: 12V, 120 ohm

See website for full specifications.



VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	30A	SPST	SY-4040	\$7.95	\$7.10	\$6.25

## Smart Hardware Competition:

- BOB RUSS, SHOPS AT JAYCAR

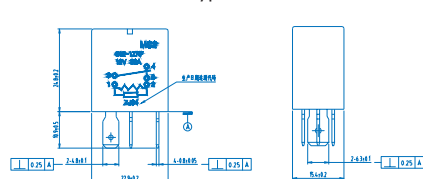
"For the helicopter controls, I made all of the metal shafts and levers, of which there were many, on the metal turning lathe my wife purchased from your Sunshine Store, for my birthday many years ago. Without the lathe and my engineering experience, I would not have been able to complete the project."



## AUTOMOTIVE RELAYS

### MICRO 30A HORN RELAYS

Extremely compact with a footprint of only 22 x 15mm, but maintaining high contact currents for automotive applications. Ideal for air horns, fog lamps or driving light installations. 30A rating on NO contacts, 20A on NC for both 12V and 24V types.



SY-4045

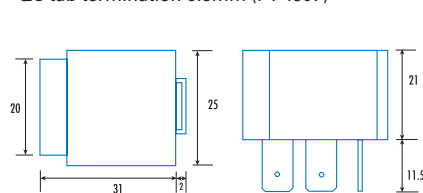
Not just for horns of course.

VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	30A	SPST	SY-4045	\$6.50	\$5.75	\$4.95
12VDC	30A	SPDT	SY-4046	\$6.50	\$5.75	\$4.95
24VDC	30A	SPDT	SY-4047	\$6.50	\$5.75	\$4.95

### AUTOMOTIVE FUSED RELAYS - 15/30A

Designed for automotive applications, these quality relays have an integrated blade fuse (fuse included) and metal mounting bracket. SY-4076 - 15A, ideal for aftermarket horns etc. SY-4077 - 30A, suits high current accessories like fog lights, driving lights etc.

- QC tab termination 6.8mm (PT-4507)

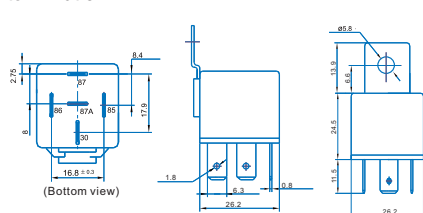


SY-4076

VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	15A	SPST	SY-4076	\$8.95	\$7.95	\$6.95
12VDC	30A	SPST	SY-4077	\$9.95	\$8.75	\$7.75

### AUTOMOTIVE HORN RELAY - 30A

Whilst designed for auto horns, this relay is ideal for any high current application. i.e. alarms, ignition cutout, transmitters, car spotlights etc. Contact voltage (nom) 12VDC. Nominal coil voltage 12VDC. QC tab termination.



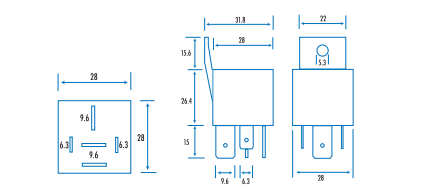
SY-4068

Also see our PCB mount version Cat. SY-4072 shown on page 138.

VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	30A	SPST	SY-4068	\$5.95	\$5.25	\$4.75
12VDC	30A	SPDT	SY-4070	\$5.95	\$5.25	\$4.75
Base to suit			SY-4069	\$4.95	\$4.45	\$3.90

### AUTOMOTIVE HORN RELAY - 60A SPDT

- Contact voltage (nom) 12VDC
- Nominal coil voltage 12VDC
- QC tab termination
- SPDT
- Heavy duty quick connectors required for 60A terminals use PT-4717 Pkt. 4



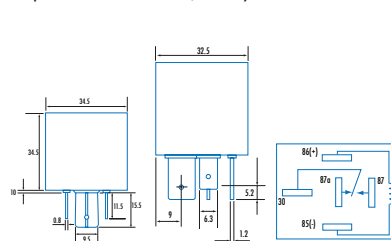
SY-4074

VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	60A	SPDT	SY-4074	\$8.95	\$7.95	\$6.95

### AUTOMOTIVE RELAY - 150A SPDT

150A contacts for ultra high power applications such as multiple lights, high power audio etc, in a small package.

- Contacts: SPDT
- Contact rating: 150A
- Coil resistance: 50  $\Omega$
- Operate time: 10ms
- Operational life: 100,000 cycles
- Contact resistance: 30m  $\Omega$  max
- Coil voltage: 12VDC
- Rated coil current: 240mA
- Release time: 5ms



SY-4073

VOLTAGE	CURRENT	CONTACTS	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC	150A	SPDT	SY-4073	\$15.95	\$14.35	\$12.75

## RELAY ACCESSORIES

### UNIVERSAL LED FLASHER RELAYS

Specifically designed to work with replacement low current LED indicator lights which may "hyper flash" when used with your cars standard flasher relay. This high frequency flashing will burn out the globe quicker. The minimum load is negligible (0.02A). Some cars will even display a burnt out bulb indicator even though it's working fine, this unit will remedy that issue.

- Nominal voltage: 12VDC
- Operating voltage: 11VDC-15VDC
- Flashing frequency: 90 times/minute +/-10%
- Silent operation
- Dimensions: 40(H) x 28(W) x 28(L)mm

### UNIVERSAL 2-PIN LED FLASHER RELAY

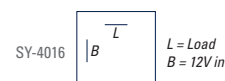
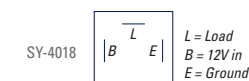
Switch current: 0.02A-10A

SY-4016

### JAPANESE CAR 3-PIN LED FLASHER RELAY

Switch current: 0.02A-20A

SY-4018



WARRANTY

TYPE	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Pin	10A	SY-4016	\$14.95	\$13.35	\$11.70
3 Pin	20A	SY-4018	\$14.95	\$13.35	\$11.70

### AUTOMOTIVE RELAY BASE TO SUIT ABOVE HORN RELAYS

This is a plug in base with cable attached.

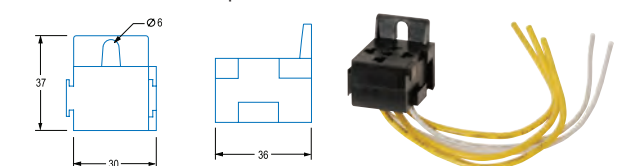
- Suits SY-4068 & SY-4070



CAT.	Qty 1+	Qty 10+	Qty 25+
SY-4069	\$4.95	\$4.45	\$3.90

### INTERLOCKING RELAY SOCKET WITH LEADS

The easy and neat way to add multiple relays to your electrical system. These relay bases interlock together, can be panel mounted and take standard 5 pin automotive relays. They also come with integral flying leads as well as bare crimp terminals for customised termination.



	CAT.	Qty 1+	Qty 10+	Qty 25+
150mm Long Leads	SY-4078	\$8.50	\$7.50	\$6.75





## REMOTE CONTROL RELAYS

### MULTI CHANNEL REMOTE CONTROL RELAY BOARDS

Add remote control functions to a new project or existing installation with these handy remote control relay boards. Available with 2 or 4 channels, each output relay is controlled by a separate button on the key fob controller. Each channel can be set to momentary or latching mode allowing you to customise the setup to suit your application. Operating on the robust 433MHz band the key fob remotes work over distances up to 40m and feature rolling code transmitting for added security.

- Selectable momentary or latching mode for each channel
- Transmission frequency: 433MHz
- Transmission range: 40m max
- Operating Voltage: 12VDC
- Relay contact rating: 28VDC 10A max / 250VAC 5A max

### 2 CHANNEL REMOTE CONTROL RELAY BOARD

- Current draw: 50mA
- Board dimensions: 85(L) x 61(W) x 20(H)mm
- Remote dimensions: 51(L) x 34(W) x 13(D)mm

CAT. LR-8855

### SPARE 2 CHANNEL KEY FOB CONTROLLER

CAT. LR-8856

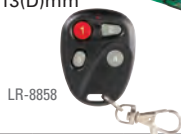
### 4 CHANNEL REMOTE CONTROL RELAY BOARD

- Current draw: 80mA
- Board dimensions: 90(L) x 73(W) x 20(H)mm
- Remote dimensions: 63(L) x 40(W) x 13(D)mm

CAT. LR-8857

### SPARE 4 CHANNEL KEY FOB CONTROLLER

CAT. LR-8858



	CAT.	Qty 1+	Qty 2+	Qty 4+
2 Channel RC Relay Board	LR-8855	\$49.95	\$44.95	\$39.95
2 Channel Keyfob	LR-8856	\$16.95	\$14.95	\$13.45
4 Channel RC Relay Board	LR-8857	\$69.95	\$62.95	\$55.95
4 Channel Keyfob	LR-8858	\$19.95	\$17.70	\$15.70

### WIRELESS 4 CH RELAY RECEIVER (12V NOMINAL SEPARATION)

This unit, which can be operated with the 2 x remotes (supplied), will control up to 4 x relays in Normally Closed or Normally Open configuration as either Momentary or Latched operation (the relays are built-in to the receiver). The relay contacts are rated at 5A at 14VDC. If higher voltage or higher power (or both) switching is needed, simply get these relays to operate a higher power relay. Strictly speaking for simple control applications, the LR-8824 is all you need.



SPECIFICATIONS	LR-8824
Power Input	10 - 15VDC
Current Draw	350mA max
Standby Current	<10mA
Transmission Distance	30m typical (300m+ max line of sight)
Transmission Frequency	433.92MHz
Transmitter Features	SAW locked, rolling-code, water-resistant.
Learning Capacity	250 remotes per module.
Outputs	4 x NO/NC contacts individually selectable as momentary or latched
Relay Contacts	5A max at 14VDC
Receiver Dimensions	68(H) x 60(W) x 25(D)mm, Antenna 150mm long when deployed



### ADDITIONAL WIRELESS RELAY TRANSMITTER UNIT

Capable of controlling the LR-8824 with up to 4 control voltage inputs. You could, for example, have an input on channel 1, which would be from say a micro-switch connected to a window or a gate in a shed or barn. The LR-8819 will transmit a signal (100m minimum, up to 400m line-of-sight) to the LR-8824 to raise an alarm. It will also accept USB type voltage signals etc. it will accept positive or negative voltage commands (it will operate without the remote controls). Essential for fixed system monitoring.

- Unit measures 68(H) x 60(W) x 25(D)mm
- Antenna is 150mm long when deployed



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless 4 Channel Relay Receiver	LR-8824	\$99.95	\$89.95	\$79.95
Additional Wireless Relay Transmitter	LR-8819	\$44.95	\$39.95	\$35.95
Spare Remote to suit LR-8824	LR-8829	\$24.95	\$22.35	\$19.70

## INLINE FUSE HOLDERS

### 3AG

- Plastic in-line type.
- As used on car radios, CB, etc
- Takes 3AG fuses
- Low volt DC only
- 5A max



CAT.	Qty 1+	Qty 10+	Qty 25+
SZ-2015	\$1.75	\$1.55	\$1.40

### 3AG MOISTUREPROOF FUSEHOLDER

Two rubber parts push together over the fuse to keep moisture out. Ideal for boats, cars etc.

- Cable needs to be soldered on, crimped to end parts.
- Could be made virtually waterproof with some silicone sealant
- Low volt DC only / 10A max



CAT.	Qty 1+	Qty 10+	Qty 25+
SZ-2014	\$2.50	\$2.21	\$1.95

### 3AG 20A HIGH CURRENT

If you want to fuse something higher than 5 amp you will need this holder.

- Super strong plastic holder
- Supplied with cable loop
- Simply cut and join to existing cables
- Low volt DC only



CAT.	Qty 1+	Qty 10+	Qty 25+
SZ-2016	\$3.50	\$3.15	\$7.15

### 5AG 60 AMP

For high-powered car sound systems.

- Accepts 5AG fuse
- 80(L) x 19(D)mm
- Supplied with a small length of cable, simply cut and join in line
- Low volt DC only

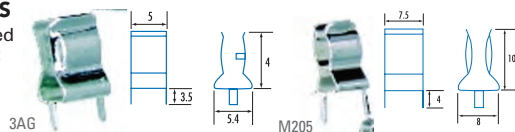


CAT.	Qty 1+	Qty 10+	Qty 25+
SZ-2065	\$8.95	\$8.05	\$7.15

## PCB MOUNT FUSE HOLDERS

### FUSE CLIPS

- Nickel plated
- PCB mount



	PKT	CAT.	Qty 1+	Qty 10+	Qty 25+
M205	8	SZ-2018	\$2.75	\$2.45	\$2.15
M205	100	SZ-2019	\$18.95	\$16.95	\$14.95
3AG	8	SZ-2022	\$2.75	\$2.45	\$2.15
3AG	100	SZ-2023	\$18.95	\$16.95	\$14.95

### M205 PCB MOUNT FUSE HOLDER

PCB mounting M205 fuse holder. Supplied with screw cover to hold fuse in place.

- Max Fuse: 6.3A @ 250VAC

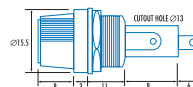


MOUNT	CAT.	Qty 1+	Qty 10+	Qty 25+
M205 Vertical	SZ-2038	\$3.50	\$3.15	\$2.75
M205 Horizontal	SZ-2039	\$3.50	\$3.15	\$2.75

## PANEL FUSE HOLDERS

### M205 - LOW VOLT ONLY

- Takes M205 fuses (20 x 5mm)
- Recommended for low voltage DC side circuits only
- Panel hole 13mm
- 6.3A 240V max



	CAT.	Qty 1+	Qty 10+	Qty 25+
M205	SZ-2030	\$1.95	\$1.75	\$1.55

For circuit breakers see page 147.





## ✓ M205 FUSES - 20 X 5mm (CONTINUED)

### M205 CERAMIC SLOW BLOW

1.0A	Cat. SF-2115	6.3A	Cat. SF-2119
4A	Cat. SF-2118	2.5A	Cat. SF-2117
1.6A	Cat. SF-2116	8A	Cat. SF-2121



Quantity breaks for one type only.

CAT.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.45	\$1.30	\$1.15

### M205 FUSE PACKS

#### 40 FUSES

5 x 500mA, 10 x 1A, 10 x 2A, 5 x 3A, 5 x 5A, 5 x 10A



CAT.	Qty 1+	Qty 10+	Qty 25+
SF-2242	\$12.95	\$11.35	\$10.35

## ✓ CERAMIC FUSES - 25 X 6mm

### CERAMIC FUSE 25 X 6mm FAST BLOW

The range of BS1362 compliant fuses is designed to suit fused British power plugs. There's lots of other equipment that won't take an M205 or 3AG fuse, and this 25mm fuse lies in the middle of the range.

- Ceramic fuse with nickel-plated end caps
- 6000A interrupting capacity
- Four ratings available: 3A, 5A, 10A and 13A



CURRENT	CAT.	Qty 1+	Qty 10+	Qty 25+
3A	SF-2100	\$1.50	\$1.35	\$1.20
5A	SF-2101	\$1.50	\$1.35	\$1.20
10A	SF-2102	\$1.50	\$1.35	\$1.20
13A	SF-2103	\$1.50	\$1.35	\$1.20

## ✓ 3AG FUSES - 1/4" X 1 1/4"

### 3AG FAST BLOW (32 X 6.35mm)

SF-2182



100mA	Cat. SF-2182	1.5A	Cat. SF-2192	7.5A	Cat. SF-2202
150mA	Cat. SF-2184	2A	Cat. SF-2194	10A	Cat. SF-2204
250mA	Cat. SF-2186	3A	Cat. SF-2196	15A	Cat. SF-2206
500mA	Cat. SF-2188	4A	Cat. SF-2198	20A	Cat. SF-2208
630mA	Cat. SF-2189	5A	Cat. SF-2200	25A	Cat. SF-2210
1A	Cat. SF-2190	7A	Cat. SF-2201		

Quantity breaks for one type only.

CAT.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$0.40	\$0.35	\$0.30

### 3AG CERAMIC FAST BLOW

These fuses are used in microwave ovens and precision equipment. They are fast acting and rapidly respond to a fault condition. They are sand filled and their interrupting capacity is 1500A at 240VAC.



7A	Cat. SF-2120	8A	Cat. SF-2122	10A	Cat. SF-2124
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CAT.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.25	\$1.10	\$0.97

### 3AG SLOW BLOW

Slow blow 3AG size glass fuses. Rated voltage 250VAC. Dimensions: 30(L) x 6(Dia)mm

SF-2226



1A	Cat. SF-2226	3A	Cat. SF-2230	7.5A	Cat. SF-2233
1.5A	Cat. SF-2227	4A	Cat. SF-2231	10A	Cat. SF-2234
2A	Cat. SF-2228	5A	Cat. SF-2232		

Quantity breaks for one type only.

CAT.	Qty 1+	Qty 10+	Qty 25+
All Types / Each	\$1.25	\$1.10	\$0.97

### 3AG FUSE PACKS

#### 40 FUSES

The economical way to buy fuses. Consists of: 4 x 500mA, 8 x 1A, 6 x 1.5A, 4 x 2A, 6 x 3A, 4 x 5A, 4 x 7.5A, 4 x 10A



CAT.	Qty 1+	Qty 10+	Qty 25+
SF-2240	\$12.95	\$11.35	\$10.35

## ✓ 5AG FUSES - 3/8" X 1 1/2"

### (10 X 38mm)

- Gold plated
- Suits the gold fuse holders in the car audio section
- Fuse size 38(L) x 10(Dia.)mm



20A	Cat. SF-1970	40A	Cat. SF-1974
30A	Cat. SF-1972	50A	Cat. SF-1976
		60A	Cat. SF-1978

CAT.	Qty 1+	Qty 4+	Qty 10+
All Types / Each	\$2.25	\$1.95	\$1.80

## ✓ GOLD 5AG FUSES - 3/8" X 1/2"

### GOLD FUSEHOLDER WITH MOUNTING BRACKET

Gold contacts and will accept both 8GA & 4GA cable. A mounting bracket is incorporated. Length 80mm - accepts 5AG fuses.



#### AMP-KING

TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
5AG	SZ-2060	\$9.95	\$8.75	\$7.75

### 5AG GOLD FUSES

These fuses suit our fuseholders shown here. Gold plated ends - and the inside conductor is also gold.

- Fuse size 38(L) x 10(Dia)mm



#### AMP-KING

CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
20A	SF-1970	\$2.25	\$1.95	\$1.80
30A	SF-1972	\$2.25	\$1.95	\$1.80
40A	SF-1974	\$2.25	\$1.95	\$1.80
50A	SF-1976	\$2.25	\$1.95	\$1.80
60A	SF-1978	\$2.25	\$1.95	\$1.80

## ✓ DMM FUSES - CERAMIC

### FAST ACTING CARTRIDGE FUSES

As used in multimeters. Fast acting fuse designed for use in circuits with high AC fault current capacity. Listed by Underwriters Laboratories and certified by CSA.

SF-2276	600V 1A	SF-2276		SF-2277	
SF-2272	1kV 10A				
SF-2274	600V 15A	SF-2274		SF-2279	

Spare ferrule fuses for our IP67 CAT IV rated DMMs:

SF-2278	1kV 500mA
SF-2279	1kV 800mA
SF-2277	1kV 10A
SF-2269	600V 500mA

Suits Fluke DMMs

SIZE(mm)	CAT.	Qty 1+	Qty 3+	Qty 6+
20 x 5.0	SF-2269	\$3.95	\$3.55	\$3.15
32 x 6.35	SF-2279	\$9.95	\$8.75	\$7.75
32 x 6.35	SF-2278	\$9.95	\$8.75	\$7.75
32 x 6.3	SF-2272	\$9.95	\$8.75	\$7.75
35 x 10	SF-2276	\$8.95	\$7.95	\$6.95
38 x 10	SF-2274	\$17.95	\$15.95	\$14.35
38 x 10	SF-2277	\$14.95	\$13.35	\$11.70

## Tech Talk: Fuse Dimensions



To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.



## ✓ BLADE FUSE HOLDERS

### 30A IN-LINE BLADE FUSE HOLDER

Accepts standard car type blade fuses. Supplied with heavy duty cable in a loop. Simply cut and join to existing cable.  
• Low volt DC only



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2040	\$2.95	\$2.60	\$2.30

### 30A PANEL MOUNT BLADE FUSE HOLDER

Panel mount for auto or marine applications. Takes standard blade fuses, rated for 12VDC 30A max.  
• Cover included



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2046	\$3.95	\$3.45	\$3.15

### 30A IN-LINE BLADE FUSE HOLDER WITH FAILURE LAMP - WATER RESISTANT

These accept ordinary blade fuses and have an integrated lamp that will light up when the fuse blows, making it easy to find the offending fuse. This is especially useful if the fuse is in a difficult or crowded location. They are supplied with 110mm leads and available to suit standard blade and mini-blade fuses.

- 30A max rating
- Ideal for circuits up to 32VDC



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard	SZ-2042	\$4.95	\$4.45	\$3.90
Mini Blade	SZ-2043	\$4.95	\$4.45	\$3.90

### 30A BLADE FUSE HOLDER WITH SCREW TERMINALS

This blade fuse holder with in-built screw terminals provides a simple wiring solution to situations where circuit protection is required.

- Current: 30A maximum
- Dimensions: 35(L) x 32(W) x 6(D)mm

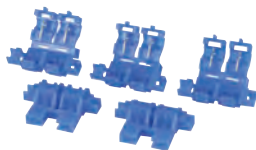


TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard 30A	SZ-2044	\$5.95	\$5.50	\$4.75

### 20A SELF CRIMPING BLADE FUSE HOLDER PACK

These are very simple blade fuse holders to install. The self crimping feature is easy to use and saves on installation time. No wire stripping or twisting required. No special tool required; just push in the wire and squeeze.

- Dimensions: 35(L) x 35(W)mm while open



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard 20A Pack of 5	SZ-2049	\$3.95	\$3.55	\$3.15

### 30A WATERPROOF BLADE FUSE HOLDER WITH LONG TRANSPARENT COVER

Quality transparent waterproof blade fuse holder. They are long enough to accept the circuit breaker blade fuse replacement models. The transparent cover allows you to inspect if a manual c/b has tripped, or able to see if an LED fuse has illuminated. This fuse holder provides extra protection against water and dust, ideal for marine applications.

- Dimensions: 65(L) x 25(W) x 15(D)mm



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard 30A Waterproof	SZ-2047	\$6.95	\$6.25	\$5.50

### 30A STACKABLE BLADE FUSE HOLDER (IN-LINE STYLE)

These fuseholders accept standard blade fuses. They slide together if more than one is required, so you could have a bank of these mounted in your car. They have a cap over the front which makes them look very neat and tidy.

- Handle 30 amps.
- Supplied with a wire loop - can be cut to suit
- Low volt DC only
- Dimensions: 41(L) x 24(H) x 10(W)mm



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard 30A	SZ-2045	\$3.95	\$3.45	\$3.15

### 6 WAY AUTOMOTIVE FUSE BOX

Fits six standard car blade fuses. Fibreglass reinforced nylon base with splashproof polycarbonate cover

- 32VDC max
- 15A/circuit max
- 45A/block max
- 6.3mm QC terminals
- Dimensions: 112(L) x 46(W) x 40(H)mm



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Standard 6 Way	SZ-2002	\$12.95	\$11.35	\$10.35

### 10 WAY WEATHERPROOF FUSE BLOCK WITH LED INDICATORS

This 10-way weatherproof fuse block is perfect for marine applications, keeping fuse and wiring connections well protected from corrosion. Each fuse socket has an LED indicator to give you quick indication of blown fuses, and there are also a number of slots to fit spare fuses. Designed for panel mount applications.



Fuses not included (without cover).

- Dimensions: 125(W) x 89(H) x 47(D)mm

TYPE	CAT.	Qty 1+
Standard 10 Way	SZ-2001	\$19.95

### MODULAR DESIGN NEGATIVE BUS BAR & BLADE FUSE BLOCK

These modular design negative bus bar and blade fuse holder series are ideal for marine and auto applications. These two models can be combined to make four popular fuse blocks depending on requirements. Each fuse block enables 6 fused circuits; mount two units neatly together to enable 12 fused circuits, in addition you can mount the 12P negative bus bar to either option just mentioned or use it alone as required. See our website for images of how the system works. These fuse blocks come with blown fuse indication LEDs and transparent cover with recessed areas for label stickers.

The assembly process is quite easy and can be done using the supplied instruction manual.

- Accepts automotive blade fuses (ATP/ATC/ATO)
- Modular design saves shelf space
- Transparent cover with recessed areas
- 60 pieces assorted label stickers set included
- Storage for 2 spare fuses (for each 6P blocks)
- LED indication for blown fuses



SZ-2011



SZ-2013

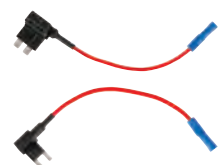
SPECIFICATIONS	SZ-2011	SZ-2013
Voltage Rating	32VDC max	32VDC max
Amp Rating Per Branch	30A (screw terminals)	30A (screw terminals)
Maximum Cumulative Amp	100A per block	100A per block
Terminal Stud Size	M5 (3/16")	M5 (3/16")
Screw Size	M4 (5/32") x 12pcs	M4 (5/32") x 6pcs
Dimensions	86(W) x 57(L) x 41(H)mm	86(W) x 78(L) x 41(H)mm

VOLTAGE	CAT.	Qty 1+	Qty 10+	Qty 25+
32VDC	SZ-2011	\$19.95	\$17.95	\$15.70
32VDC	SZ-2013	\$34.95	\$31.45	\$27.90

## ✓ WIRE TAPPED BLADE FUSES

### DOUBLE BLADE FUSE SOCKET WIRE TAP

If you've ever wanted to install 12VDC devices near or around your dash but have been put off by the need to manually install new wiring and run it into your engine bay this is a great solution. Simply plug the fuse into a socket in your fusebox and you'll have an instant 12VDC power source. A great way to power headrest monitors, extra internal car lighting, gauges, and more. Outputs to a female bullet crimp connector. Comes in standard and mini blade fuse models.



	CAT.	Qty 1+	Qty 10+	Qty 25+
Double Blade Fuse Socket	SF-5115	\$4.95	\$4.45	\$3.90
Double Mini Blade Fuse Socket	SF-5125	\$4.95	\$4.45	\$3.90

## ▼ BLADE FUSE HOLDERS (CONTINUED)

### 6 & 10 WAY BLADE FUSE BLOCKS

Convenient fuse blocks with integrated "fuse blown" indicator LEDs. The clear plastic cover allows you to quickly fault-find without disturbing your wiring. Includes quality bolt-down output connections for eye-terminals connection.

Suitable for use in 12-24V systems, 30A max per fuse channel. Input cable up to 4-gauge. Uses standard automotive blade fuses, and includes a handy sheet of common labels, to make identification of connections even easier.

- Red LED "blown fuse" indicators
- Heavy duty bolt or convenient spade terminals
- Clear fuse cover



SZ-2095



SZ-2098

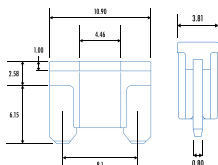
SPECIFICATIONS	ALL
Input Terminal Rating	32VDC @ 100A Max.
Input Wire Size	4-6 AWG
Output Terminal Rating	30A Max. per Circuit
Output Wire Size	12-16 AWG
Fuse	Automotive Blade up to 30A

	WEIGHT	DIMENSIONS	CAT.	Qty 1+	Qty 10+	Qty 25+
6 Way Screw	78g	85(W) x 70(D) x 37(H)mm	SZ-2095	\$18.95	\$16.95	\$14.95
6 Way Spade	68g	90(W) x 70(D) x 40(H)mm	SZ-2096	\$18.95	\$16.95	\$14.95
10 Way Screw	116g	100(D) x 85(W) x 37(H)mm	SZ-2097	\$24.95	\$22.45	\$19.95
10 Way Spade	100g	100(D) x 85(W) x 38(H)mm	SZ-2098	\$24.95	\$22.45	\$19.95

## ▼ STANDARD BLADE FUSES

### MICRO BLADE FUSES - 10 PACK

Micro-blade fuses to suit newer model cars. The pack contains one each of 5, 7.5, 25, 30A and two each of 10, 15, 20A.



CURRENT	MULTIPACK	CAT.	Qty 1+	Qty 10+	Qty 25+
5-30A	Pkt 10	SF-2146	\$9.95	\$8.75	\$7.75

### MINI BLADE FUSES

They look similar to the standard car blade fuses, except they are smaller. Used in new Holden Commodores, Falcons & more.

Quantity breaks for one type only



CURRENT	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
2A	Grey	SF-1909	\$0.95	\$0.85	\$0.75
3A	Pink	SF-1910	\$0.95	\$0.85	\$0.75
5A	Orange	SF-1912	\$0.95	\$0.85	\$0.75
7.5A	Brown	SF-1913	\$0.95	\$0.85	\$0.75
10A	Red	SF-1914	\$0.95	\$0.85	\$0.75
15A	Blue	SF-1915	\$0.95	\$0.85	\$0.75
20A	Yellow	SF-1916	\$0.95	\$0.85	\$0.75
25A	Clear	SF-1917	\$0.95	\$0.85	\$0.75

### STANDARD BLADE FUSES

Quantity breaks for one type only



CURRENT	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
1A	Black	SF-2126	\$0.85	\$0.75	\$0.65
2A	Grey	SF-2127	\$0.85	\$0.75	\$0.65
3A	Pink	SF-2128	\$0.85	\$0.75	\$0.65
5A	Orange	SF-2130	\$0.85	\$0.75	\$0.65
7.5A	Brown	SF-2132	\$0.85	\$0.75	\$0.65
10A	Red	SF-2134	\$0.85	\$0.75	\$0.65
15A	Blue	SF-2136	\$0.85	\$0.75	\$0.65
20A	Yellow	SF-2138	\$0.85	\$0.75	\$0.65
25A	Clear	SF-2137	\$0.85	\$0.75	\$0.65
30A	Green	SF-2139	\$0.85	\$0.75	\$0.65
35A	Purple	SF-2143	\$0.85	\$0.75	\$0.65
40A	Orange	SF-2141	\$0.85	\$0.75	\$0.65

### AUTOMOTIVE FUSE PACK

This kit contains around 120 standard size automotive fuses housed in a 6 compartment storage box. 20 x 5A, 10A, 15A, 20A, 25A & 30A fuses are included.



CAT.	Qty 1+	Qty 10+	Qty 25+
SF-2142	\$23.95	\$21.35	\$18.95

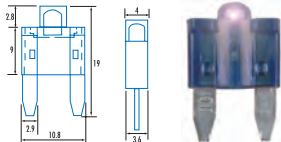
## ▼ BLADE FUSES WITH FAILURE LAMP

Not your ordinary blade fuse, these have an integrated lamp which illuminates the moment the fuse blows. This makes finding that blown fuse a cinch, especially when the fuse is in a hard to get location, like under the car dashboard. They don't cost much either, so they are a very worthwhile investment.

### MINI BLADE FUSES

Quantity breaks for one type only

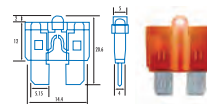
- Ideal for circuits up to 32VDC
- 19(H) x 10.8(L) x 4(W)mm approx



CURRENT	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
3A	Pink	SF-5070	\$1.30	\$1.15	\$1.01
5A	Orange	SF-5072	\$1.30	\$1.15	\$1.01
7.5A	Brown	SF-5074	\$1.30	\$1.15	\$1.01
10A	Red	SF-5076	\$1.30	\$1.15	\$1.01
15A	Blue	SF-5078	\$1.30	\$1.15	\$1.01
20A	Yellow	SF-5080	\$1.30	\$1.15	\$1.01
25A	Clear	SF-5082	\$1.30	\$1.15	\$1.01
30A	Green	SF-5084	\$1.30	\$1.15	\$1.01
5-30A	Pkt 6	SF-5085	\$6.95	\$6.25	\$5.50

### STANDARD BLADE FUSES

- Dimensions: 20.6(H) x 14.4(L) x 5(W)mm approx



CURRENT	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
3A	Pink	SF-5020	\$1.20	\$1.05	\$0.95
5A	Orange	SF-5022	\$1.20	\$1.05	\$0.95
10A	Red	SF-5026	\$1.20	\$1.05	\$0.95
15A	Blue	SF-5028	\$1.20	\$1.05	\$0.95
20A	Yellow	SF-5030	\$1.20	\$1.05	\$0.95
30A	Green	SF-5034	\$1.20	\$1.05	\$0.95
5-30A	Pkt 6	SF-5035	\$5.95	\$5.25	\$4.75

### BLADE & MINI BLADE PULLING TOOL

These handy fuse pullers make easy work of exchanging blown fuses. The device is suitable for both micro and mini blade fuses.

- Dimensions: 63(L) x 20(W) x 5(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
Fuse Puller TH-1973	\$1.95	\$1.75	\$1.55

## ANL WAFER FUSES & HOLDERS

### GOLD ANL WAFER FUSES

These wafer fuses feature gold finish screw-down contacts for maximum current transfer and conductivity and are designed for really high current applications such as for car audio amplifiers, etc.

- Use with our SZ-2075 - Inline Wafer Fuseholder
- 5 current ratings available



AMP-KING

CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
80A	SF-1990	\$8.95	\$7.95	\$6.95
100A	SF-1992	\$8.95	\$7.95	\$6.95
150A	SF-1995	\$8.95	\$7.95	\$6.95
200A	SF-1997	\$8.95	\$7.95	\$6.95
250A	SF-1999	\$8.95	\$7.95	\$6.95

### ANL IN-LINE FUSE HOLDER

A solid brass ANL inline fuse holder that is nickel plated. A great looking and functional fuse holder that is suitable for high end car audio installations.

- Dimensions: 95(L) x 50(W) x 36(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
SZ-2078	\$14.95	\$13.45	\$11.95

## FUSE WIRE

### FUSE WIRE

Includes 8 amp for lights and 15 amp for power. An essential item to carry in the fuse box of older homes. Have it there when you need it.



CAT.	Qty 1+	Qty 10+	Qty 25+
Fuse Wire	SZ-2005	\$2.95	\$2.60

## CIRCUIT BREAKERS - BLADE FUSE SIZE

A blade fuse that doesn't need replacing! This range of mini and standard size Blade circuit breakers are designed to directly replace standard or mini blade fuses. No need to fumble around in the dark looking for the blown fuse or to dig around in the toolbox for a suitable replacement. Choose between manual or automatic reset types. The manual type suit 12V-24V systems and trip once the current is exceeded, and allow you to fault find the circuit before resetting. The auto reset type suits 12V systems and will re-establish power to the circuit once the current returns to normal levels. Available in Mini or Standard size, and come in similar colour coding to standard blade fuses.

### MINI BLADE CIRCUIT BREAKERS - MANUAL RESET

- Voltage: Circuits up to 28VDC
- Body dimensions: 25(L) x 12.5(W) x 7(D)mm (excludes 1mm reset button)
- Total length including blades: 35mm (excludes 1mm reset button)



CURRENT	COLOUR	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
5A	Tan	Manual	SF-2352	\$5.95	\$5.50	\$4.75
10A	Red	Manual	SF-2354	\$5.95	\$5.50	\$4.75
15A	Blue	Manual	SF-2355	\$5.95	\$5.50	\$4.75
20A	Yellow	Manual	SF-2356	\$5.95	\$5.50	\$4.75

### STANDARD BLADE CIRCUIT BREAKERS - MANUAL RESET

- Voltage: Circuits up to 28VDC
- Body dimensions: 24(L) x 20(W) x 6(D)mm (excludes 1mm reset button)
- Total length including blades: 31mm (excludes 1mm reset)



CURRENT	COLOUR	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
5A	Lt. Brown	Manual	SF-2330	\$5.95	\$5.50	\$4.75
7.5A	Brown	Manual	SF-2331	\$5.95	\$5.50	\$4.75
10A	Red	Manual	SF-2333	\$5.95	\$5.50	\$4.75
15A	Blue	Manual	SF-2334	\$5.95	\$5.50	\$4.75
20A	Yellow	Manual	SF-2335	\$5.95	\$5.50	\$4.75
25A	White	Manual	SF-2336	\$5.95	\$5.50	\$4.75
30A	Green	Manual	SF-2337	\$5.95	\$5.50	\$4.75

### MINI BLADE CIRCUIT BREAKERS - AUTO RESET

- Voltage: Circuits up to 14VDC
- Body dimensions: 25(L) x 12.5(W) x 6(D)mm
- Total length including blades: 35mm



CURRENT	COLOUR	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
5A	Tan	Auto	SF-2342	\$5.95	\$5.50	\$4.75
10A	Red	Auto	SF-2344	\$5.95	\$5.50	\$4.75
15A	Blue	Auto	SF-2345	\$5.95	\$5.50	\$4.75
20A	Yellow	Auto	SF-2346	\$5.95	\$5.50	\$4.75

### STANDARD BLADE CIRCUIT BREAKERS - AUTO RESET

- Voltage: Circuits up to 14VDC
- Body dimensions: 24(L) x 20(W) x 6(D)mm
- Total length including blades: 31mm



CURRENT	COLOUR	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
5A	Lt. Brown	Auto	SF-2320	\$5.95	\$5.50	\$4.75
7.5A	Brown	Auto	SF-2321	\$5.95	\$5.50	\$4.75
10A	Red	Auto	SF-2323	\$5.95	\$5.50	\$4.75
15A	Blue	Auto	SF-2324	\$5.95	\$5.50	\$4.75
20A	Yellow	Auto	SF-2325	\$5.95	\$5.50	\$4.75
25A	White	Auto	SF-2326	\$5.95	\$5.50	\$4.75
30A	Green	Auto	SF-2327	\$5.95	\$5.50	\$4.75

## CIRCUIT BREAKERS

### CHASSIS MOUNT AUTO CIRCUIT BREAKERS

Single pole thermal circuit breaker. Auto reset.

- 12 and 24VDC in current ratings from 20 - 50A



AMP	VOLTAGE	CAT.	Qty 1+	Qty 10+	Qty 25+
20A	12VDC	SF-4100	\$7.95	\$6.95	\$6.25
30A	12VDC	SF-4102	\$7.95	\$6.95	\$6.25
40A	12VDC	SF-4104	\$7.95	\$6.95	\$6.25
50A	12VDC	SF-4106	\$7.95	\$6.95	\$6.25
20A	24VDC	SF-4108	\$7.95	\$6.95	\$6.25

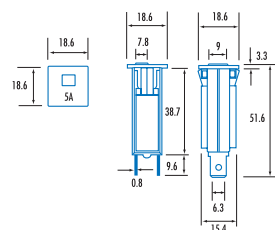
### PANEL MOUNT THERMAL CIRCUIT BREAKERS (CBE)

#### IEC 934 TYPE "R/TO"

These attractive looking units feature a black 19mm square facade with a centrally mounted bright red 'trip' button.

- When tripped, the red button extends
- To reset simply push button back in (once fault has been cleared)
- Slow response time ideal for inductive/reactive loads

SPECIFICATIONS	ALL MODELS
Hold Current	100% load indefinitely
Trip Current	Within 1 hour @ 135% load, Within 1 min. @ 200% load
Input	32VDC, 125VAC & 250VAC
Dielectric Strength	1500VAC 1 Minute
Contact Endurance	>500 cycles @ 150% of contact rating.



AMP	RESISTANCE (Ω)	CAT.	Qty 1+	Qty 10+	Qty 25+
3	0.16	SF-2293	\$8.95	\$7.95	\$6.95
5	0.12	SF-2295	\$8.95	\$7.95	\$6.95
7	0.075	SF-2297	\$8.95	\$7.95	\$6.95
10	0.015	SF-2300	\$8.95	\$7.95	\$6.95
15	0.008	SF-2315	\$8.95	\$7.95	\$6.95



## ▼ CIRCUIT BREAKERS (CONTINUED)

### PCB MOUNT THERMAL CIRCUIT BREAKERS (SPST)

Miniature auto-resetting thermal type units that solder directly into a PCB.

- Ideal for protecting power supplies, amplifier output transistors, appliances etc
- Slow response time is ideal when capricious tripping would be a nuisance
- Judicious selection of breaker rating will ensure protection without unnecessary tripping



SPECIFICATIONS	ALL MODELS
<b>Calibration</b>	100% rated; will not trip. (all at 25°C) 101-170% increasing likelihood of trip / 175-199% trip within 1 hour. 200% within 1 minute / 200% + from 1 minute to seconds.
<b>Input</b>	12VDC, 125VAC
<b>Dielectric Strength</b>	1500VAC 1 Minute
<b>Contact Endurance</b>	>1000 cycles, @ 150% of contact rating.

		CAT.	Qty 1+	Qty 10+	Qty 25+
1.5	0.12	SF-2281	\$6.95	\$6.25	\$5.50
3	0.075	SF-2283	\$6.95	\$6.25	\$5.50
4	0.050	SF-2284	\$6.95	\$6.25	\$5.50
5	0.050	SF-2285	\$6.95	\$6.25	\$5.50

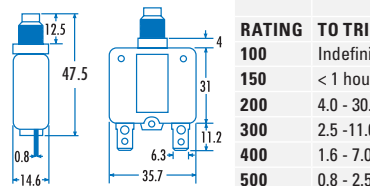
### ELECTRICAL TYPE CIRCUIT BREAKER

These circuit breakers are rated at 250VAC.

- Maximum voltage 250VAC or 50VDC
- Will hold 100% of rated current indefinitely at 25°C
- Derate at higher temperatures
- Manual push reset
- Insulation resistance >100M ohm
- Mounting hole diameter 12mm
- Size 46(H including terminals) x 35.7(D) x 14.6(W)mm



TYPICAL DERATING FACTORS			RATING	% OF	TIME TO TRIP
TEMP °C	10-25A	2-5A			
60	0.50	-	100	Indefinite	
50	0.60	-	150	< 1 hour	
40	0.72	0.45	200	4.0 - 30.0 sec	
30	0.85	0.70	300	2.5 - 11.0 sec	
25	1.00	1.00	400	1.6 - 7.0 sec	
20	1.10	1.20	500	0.8 - 2.5 sec	
10	1.25	1.45	600	0.6 - 1.7 sec	



AMP	APPROVAL	CAT.	Qty 1+	Qty 10+	Qty 25+
3	CS8389N	SF-2252	\$8.85	\$7.75	\$6.95
5	CS8389N	SF-2254	\$8.85	\$7.75	\$6.95
10	CS8389N	SF-2258	\$8.85	\$7.75	\$6.95
15	CS8389N	SF-2259	\$8.85	\$7.75	\$6.95
20	CS8389N	SF-2260	\$8.85	\$7.75	\$6.95
25	CS8389N	SF-2261	\$8.85	\$7.75	\$6.95

## TRADE CARD

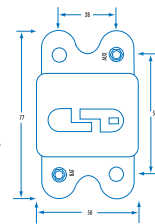
If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required – see website, T&C or Store Manager for details.



### HIGH CURRENT DC CIRCUIT BREAKERS

Moulded in black electrical grade bakelite, these rugged and reliable devices allow you to simply reset rather than find another expensive fuse. They offer lower voltage drop than a fuse and can be used as an occasional circuit isolation switch. Two popular current ratings. Both units have the same physical dimensions. Ideal for car sound installations. Operating voltage is 12 to 14VDC. Each device will trip within a few milliseconds under short circuit conditions and feature protective rubber caps, test button and gold plated 5mm dia. terminals.



#### 70A 12-14VDC

Will trip within 1 minute at 90A load. Will trip within a few milliseconds under short circuit conditions. Supplied with 5mm dia gold plated terminals with captive shakeproof washer and provision for up to 1/4" mounting bolts. Protective rubber caps for terminals. Test button on top of unit enables circuit breaker to be used as switch circuit restored with simple lever action.



#### 100A 12-14VDC

Will trip at 110A or immediately under short circuit conditions.

RATING (A)	RESISTANCE (Ω)	CAT.	Qty 1+	Qty 10+	Qty 25+
70	0.12	SF-2265	\$26.95	\$23.95	\$21.35
100	0.075	SF-2266	\$26.95	\$23.95	\$21.35

### MARINE GRADE ILLUMINATED SWITCH PANELS WITH CIRCUIT BREAKERS

An economical solution to controlling multiple DC circuits on your boat, or any other application where you want to switch multiple DC circuits. Each switch panel is an attractive moulded ABS plate, with high quality 10A rated illuminated rocker switches and re-settable circuit breakers on each circuit. Power is supplied on a common rail to keep wiring neater, and wiring connections are made with standard spade terminals. Two versions available:

4 Way - Dimensions 110(H) x 100(W) x 45(D)mm

Cat. SZ-1902

6 Way - Dimensions 160(H) x 100(W) x 45(D)mm

Cat. SZ-1903



SIZE	CAT.	Qty 1+	Qty 10+	Qty 25+
4 Way	SZ-1902	\$39.95	\$35.95	\$31.95
6 Way	SZ-1903	\$49.95	\$44.95	\$39.95

### IP66 MARINE SWITCH PANELS WITH CIRCUIT BREAKERS

These units feature the attractive tactile rocker switches that are common on luxury Australian and foreign made motor cruisers. The panels have Butyl rubber gaskets and IP66 water resistant rated switches and circuit breakers, making these switch panels suitable for an exposed environment. They are pre-wired as much as possible, with wiring connections made via standard spade terminals for ease. Both require about 80mm of space behind the mounting bulkhead. The 4 way has 6,10,15 & 20A rated circuit breakers and the 6 way has 6,6,10,10,15 & 20A breakers, and the switches feature LED illumination to let you know which circuit is active.

- Moulded from ABS plastic

Two versions available:

4 Way: 120(H) x 130(W)mm

6 Way: 170(H) x 130(W)mm



TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
4 Way	SZ-1906	\$69.95	\$62.95	\$55.95
6 Way	SZ-1907	\$99.95	\$89.95	\$79.95

### HEAVY DUTY PANEL MOUNT CIRCUIT BREAKERS

A range of heavy duty and high quality panel mount circuit breakers. The reset switch on these units are high grade and will not fail in short period unlike other units in the market. It has a protective plastic cover to prevent accidental shortage. Incorporates multi-wire gauge inputs and outputs, they are perfect for high end car audio installations, automotive wiring or solar installations. Terminals are platinum plated.

- Measures at 85(W) x 68(H) x 35(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
60A	SZ-2081	\$39.95	\$35.95	\$31.95
120A	SZ-2083	\$39.95	\$35.95	\$31.95
200A	SZ-2085	\$39.95	\$35.95	\$31.95



## CIRCUIT BREAKERS (CONTINUED)

### ANTI-TAMPER 4-GANG SWITCH BANK/CIRCUIT BREAKER

This switch bank consists of a gang of 4 x 16A/12VDC circuit breaker rocker switches pre-wired with protective translucent panels to discourage naughty fingers tampering with them. The rockers act like switches but will behave like a circuit breaker if any circuit pulls more than 16A. They would typically be used to power all sorts of things while under way which should not be turned off.

Each translucent panel has a recess to accept a permanent sticker announcing the function of the switch. A sheet of decal annunciators is supplied with 45 (yes 45) labels. These range from "Bilge Pump" to "Deck Wash", to "Fridge", "Macerator Pump", "Radar", "VHF", etc. Front dimensions of the panel are 130(W) x 50(H) mm. Approx. 40mm is needed behind the panel for wiring access. 2 x No. 8 countersunk screws are supplied.



CAT.	Qty 1+	Qty 10+	Qty 25+
SZ-1926	\$29.95	\$26.95	\$23.95

## POLYSWITCHES

### PTC FUSES - CIRCUIT PROTECTION

Polyswitch protectors are based on conductive polymers and act like resettable solid state circuit breakers. When the operating current of the protector is exceeded the interior of the device partially melts, which increases the volume increasing the resistance drastically. This in turn reduces the current. The device stays in this state while the current is maintained because its temperature is elevated. Once the current is removed, the device re-establishes itself almost immediately, so that the low resistance value is restored.

- Voltage ratings RN3460/62 - 60V; the rest are 50V



CAT.	INDUSTRY PART NO	TRIP WATTS 4Ω	6Ω	8Ω	TRIP CURRENT AMPS
RN-3460	RXE075	5.1	7.7	10.2	1.50
RN-3462	RXE090	7.3	10.9	14.6	1.8
RN-3464	RXE110	10.9	16.3	21.8	2.2
RN-3466	RXE160	23.0	34.6	46.1	3.2
RN-3468	RXE185	31.4	47.0	62.7	3.7
RN-3470	RXE250	56.3	84.4	112.5	5.0

INDUSTRY NO.	CAT.	Qty 1+	Qty 10+	Qty 25+
RXE075	RN-3460	\$2.95	\$2.60	\$2.30
RXE090	RN-3462	\$3.25	\$2.90	\$2.60
RXE110	RN-3464	\$3.50	\$3.15	\$2.75
RXE160	RN-3466	\$3.95	\$3.45	\$3.15
RXE185	RN-3468	\$3.95	\$3.45	\$3.15
RXE250	RN-3470	\$4.50	\$3.95	\$3.60



## Smart Hardware Competition:

- JOHN BATT, SHOPS AT JAYCAR DUNEDIN

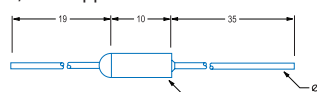
"This is a PWM model train controller. It gives very good motor control especially at low speeds. Has built in overload protection. Runs off a standard 12 volt power pack."

## THERMAL PROTECTION

### THERMAL FUSES

These devices go open circuit permanently when they reach their rated temperature. They are used extensively in 240V mains rated appliances including, heaters, fan heaters, curlers, hair dryers, toasters, etc.

- UL, CSA Approved



CAT.	Tf°C	Th°C	Tm°C	OPENING TEMP
ST-3800	75	50	105	70°C +3/-1
ST-3804	136	101	166	132°C +2/-2
ST-3808	158	123	263	154°C +0/-5
ST-3810	185	150	263	192°C +1/-3
ST-3812	219	174	249	214°C +2/-2
ST-3814	233	188	263	229°C +1/-3

MARKING	CAT.	Qty 1+	Qty 10+	Qty 25+
Yellow	ST-3800	\$3.50	\$3.15	\$2.75
Grey	ST-3804	\$3.50	\$3.15	\$2.75
Black	ST-3808	\$3.50	\$3.15	\$2.75
Light Green	ST-3810	\$3.50	\$3.15	\$2.75
Dark Green	ST-3812	\$3.50	\$3.15	\$2.75
Dark Blue	ST-3814	\$3.50	\$3.15	\$2.75

## THERMOSTAT SWITCHES

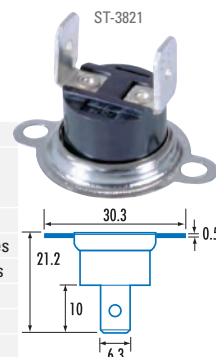
### THERMAL CIRCUIT BREAKER/SWITCH

#### AUTOMATIC RESETTING BI-METALLIC DISC, SNAP ACTING

This phenolic-housed unit attaches to any metal surface which needs to be heat monitored.

- Normally closed or normally open available

SPECIFICATIONS	ALL MODELS
Operating Tolerance	+/- 5°C (32VDC), +/- 8°C (125VAC), +/- 10°C (250VAC)
Reset Differential	10°C - 50°C
Contact Endurance	32VDC - 100mA - 50,000 cycles
Cycles	125VAC - 10A - 100,000 cycles
Cycles	250VAC - 6A - 30,000 cycles
Interrupt Capacity	125VAC x 60A - 5 cycles
Overshoot Temperature	200°C/5 minutes
Dielectric Strength	1500VAC 1 minute
Reset Type	Auto Reset



OPENING TEMP (°C)	RECLOSING TEMP (APPROX) (°C)		CAT.	QTY1+	QTY 10+	QTY 25+
60	40	Normally Closed	ST-3821	\$5.75	\$4.95	\$4.60
70	58	Normally Closed	ST-3823	\$5.75	\$4.95	\$4.60
90	75	Normally Closed	ST-3825	\$5.75	\$4.95	\$4.60
100	85	Normally Closed	ST-3826	\$5.75	\$4.95	\$4.60

### NORMALLY CLOSED

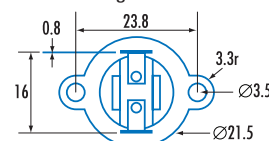
When the surface meets or exceeds a certain temperature the SPST bi-metallic element goes open circuit.

- The unit resets automatically when temperature falls below a specified limit
- Ideal for any electrical item that needs thermal protection

### NORMALLY OPEN

These thermostat switches have normally open contacts. They operate once the temperature reaches a specified limit and automatically reset to their original normally open state once the temperature drops below its rated temperature. These are suitable for power amplifier applications and other temperature sensitive devices where a cooling fan needs to be integrated to cool the device down.

Mounting holes are provided, ideal for attachment to a heatsink or any metallic surface.

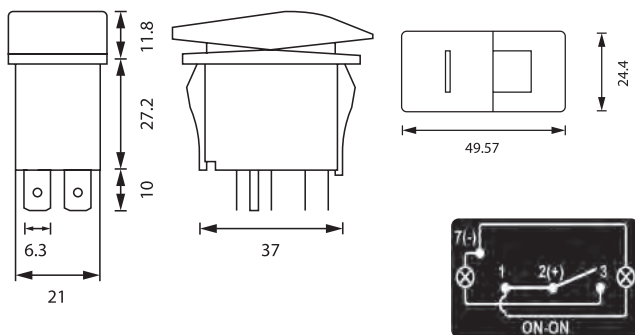


THERMOSTAT(°C)		CAT.	Qty 1+	Qty 10+	Qty 25+
50	Normally Open	ST-3831	\$5.75	\$4.95	\$4.60
70	Normally Open	ST-3833	\$5.75	\$4.95	\$4.60
100	Normally Open	ST-3836	\$5.75	\$4.95	\$4.60

## Individual "Contura" Style DC Rocker Switches

These are the superb looking rocker switches that you have seen in the cockpits of the 70-100ft luxury motor cruisers recently. They would look great in your 4WD, RV, Caravan or any other application as well. The base switch supplied (rated at 12V 20A, 24V 10A) comes with a double-LED illumination (low in OFF, high in the ON position), a standard rocker cover and a standard range of decals to customise the switch to your

application. Typical decals are symbols for: windscreen wipers, horn, heater, etc; there are dozens of these decals included. Also available are a set of special laser-etched covers with the following graphic symbols to really create a professional finish. You need to buy the basic switch (in blue, white or red illumination) and then the custom cover (if required).



RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
12V 20A/24V 10A	SPDT White	SK-0910	\$12.95	\$11.35	\$10.35
12V 20A/24V 10A	SPDT Red	SK-0912	\$12.95	\$11.35	\$10.35
12V 20A/24V 10A	SPDT Blue	SK-0914	\$12.95	\$11.35	\$10.35
12V 20A/24V 10A	SPDT Amber	SK-0916	\$12.95	\$11.35	\$10.35



LASER-ETCHED ROCKERS	CAT.	Qty 1+	Qty 10+	Qty 25+
12V Power	SK-0920	\$12.95	\$11.35	\$10.35
Fridge	SK-0921	\$2.95	\$2.60	\$2.30
Aux Battery	SK-0922	\$2.95	\$2.60	\$2.30
Interior Lights	SK-0923	\$2.95	\$2.60	\$2.30
Spot Lights	SK-0924	\$2.95	\$2.60	\$2.30
Horn	SK-0925	\$2.95	\$2.60	\$2.30
Rear View Camera	SK-0926	\$2.95	\$2.60	\$2.30
Inverter	SK-0927	\$2.95	\$2.60	\$2.30
Driving Lights	SK-0928	\$2.95	\$2.60	\$2.30
Thermofan	SK-0929	\$2.95	\$2.60	\$2.30

### MODULAR ROCKER SWITCH BRACKETS

Compatible with our Contura style switches, these brackets use a clever modular design allows you to "stack" multiple rocker switches together into a single cutout. The end-cap piece works for either end, and you can put as many centre pieces in as you like. Also available in a single-switch mount. 100% interchangeable with the round-hole variant of these brackets - PS-2806/PS-2808 (See page 416).



	CAT.	Qty 1+	Qty 10+	Qty 50+
Single Mount	SK-0800	\$3.50	\$3.15	\$2.80
Modular End	SK-0802	\$3.50	\$3.15	\$2.80
Modular Centre	SK-0804	\$3.50	\$3.15	\$2.80

See our "Contura" Style USB Sockets on page 416.

### ROCKER SWITCHES

#### SPST - ULTRA MINI

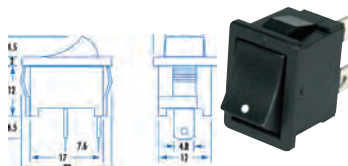
- Snap in fitting
- SPST 250VAC 6A
- Cutout size 6.5(W) x 19(H)mm
- Black body, black actuator
- QC tab termination 6.4mm (PT-4607)



		CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SPST	SK-0975	\$1.95	\$1.75	\$1.55

#### SPST - MINI

- Dimensions: 21 x 15mm
- Panel cut out size 13 x 19.5mm
- QC tab termination
- SPST 240V 6A
- Black actuator



		CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC 6A	SPST	SK-0984	\$1.95	\$1.75	\$1.55

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store. \* Conditions apply.

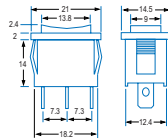




## ROCKER SWITCHES (CONTINUED)

### SPDT - CENTRE OFF

- Latching
- Voltage: 250VAC
- Current: 6 Amp

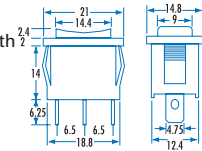


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SPDT SK-0991	\$4.95	\$4.45	\$3.90

### SPDT - MINI - CENTRE OFF SPRING RETURN BOTH SIDES

Momentary contacts with spring return to centre on both sides.

- Mini QC tab termination 6.4mm (PT-4607)
- Contact arrangement SPDT N.O.



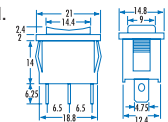
RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250V 6A	SPDT SK-0987	\$4.95	\$4.45	\$3.90

### SPST IP56 RATED MINI ROCKER SWITCH

SPST mini rocker switches with spade QC lugs. Sealed with a rubber boot and IP56 rated.

Two types available:

- Black: SK-0968
- Red (illuminated): SK-0969
- Cutout: 18.8 x 12.5mm

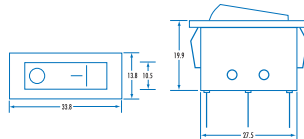


RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	Black	SK-0968	\$5.75	\$4.95	\$4.60
12VDC 16A	Red - Illuminated	SK-0969	\$6.75	\$5.95	\$5.25

### SPST - ILLUMINATED

Black body with illuminated actuator. Ideal replacements for appliances

- Snap in fitting
- QC tab termination 6.8mm (PT-4507)
- Cutout: 33.8 x 13.8mm

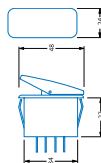


RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC 15A	Blue	SK-0976	\$3.50	\$3.15	\$2.75
240VAC 15A	Red	SK-0978	\$3.50	\$3.15	\$2.75
240VAC 15A	Green	SK-0979	\$3.50	\$3.15	\$2.75

### SPDT IP65 ILLUMINATED CENTRE OFF ROCKER SWITCH

IP65 rated, illuminated switch for automotive and marine applications. Illuminates one side red and one side green

- On-Off-On
- Rating: 14VDC, 21A
- Cutout size: 34 x 21mm

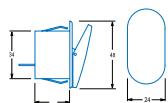


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
14VDC 21A	SPDT SK-0999	\$12.95	\$11.35	\$10.35

### SPST ILLUMINATED IP56 RATED ROCKER SWITCH

IP56 rated, large rocker actuator.

- SPST
- Illuminated red
- Rated for 12VDC 20A
- Mounting hole 20.5 x 37mm



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 20A Red Illuminated	SK-0997	\$12.95	\$11.35	\$10.35

### INLINE LOW VOLTAGE SWITCH

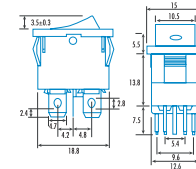
Simply connect your plug pack adaptor into this handy in-line switch to provide quick and easy on/off control. Much easier than unplugging the connector or reaching for the power point when you want to switch your device on or off. Fitted with 2.1mm DC plug & socket and rated at 24VDC at 2 amps.



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
24VDC 2A	SK-0998	\$7.95	\$6.95	\$6.25

### DPST - MINI - NEON ILLUMINATED

- 240VAC
- Illuminated actuator
- Solder terminals
- QC tab termination 6.4mm (PT-4607)



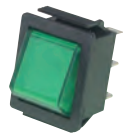
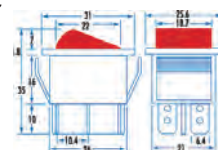
AS USED IN OUR POWERBOARDS

RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC 10A	DPST Red	SK-0995	\$4.95	\$4.45	\$3.90

### DPDT - LARGE - NEON ILLUMINATED

Mains Illuminated. DPDT 240VAC 15 amp.

- Black body, available in red or green illumination
- Spade lug connections
- Cutout 27 x 22mm
- QC tab termination 6.8mm (PT-4507)

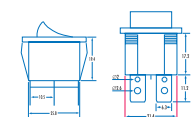


RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC 15A	DPDT Red	SK-0982	\$4.95	\$4.45	\$3.90
240VAC 15A	DPDT Green	SK-0983	\$4.95	\$4.45	\$3.90

### DPDT - LARGE - NON ILLUMINATED

DPDT switch with black body and black actuator.

- QC tab termination
- 240VAC 16A
- Snap in fitting



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC 16A	SK-0981	\$3.95	\$3.45	\$3.15

### DPDT - LARGE - CENTRE/OFF

Spring Return Both Sides, Momentary contacts with spring returns to centre on both sides. These are commonly used for car power antennas and power windows.

- Rated at 10A 250VAC
- QC tab termination 6.4mm (PT-4607)



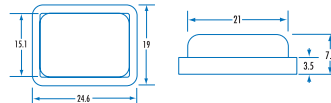
RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	SK-0980	\$7.95	\$6.95	\$6.25

### WATERPROOF CAPS FOR ROCKER SWITCHES

Push-on, clear plastic caps to suit rocker switches.

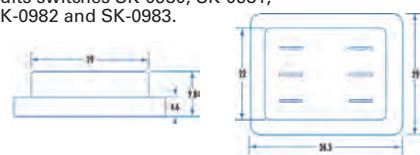
#### SUITS MINI SWITCHES

Suits switches SK-0984, SK-0985 and SK-0987.



#### SUITS LARGE ROCKER SWITCHES

Suits switches SK-0980, SK-0981, SK-0982 and SK-0983.

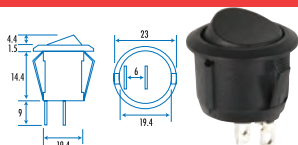


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
Suits Mini Rocker Switches	SK-0970	\$1.40	\$1.25	\$1.10
Suits Larger Rocker Switches	SK-0972	\$1.95	\$1.75	\$1.55

## ROCKER SWITCHES (CONTINUED)

### SPST - ROUND ACTUATOR

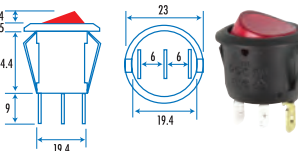
- Snap fits into a 20mm round hole
- 10 amps @ 250VAC
- Black body with black actuator
- QC tab termination 6.4mm (PT-4607)



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 10A	SK-0960	\$2.25	\$1.95	\$1.80

### SPST - ROUND ACTUATOR

- Illuminated Red
- Snap fits into a 20mm round hole
- 6A @ 250VAC
- Black body with red neon actuator
- QC tab termination 6.4mm (PT-4607)

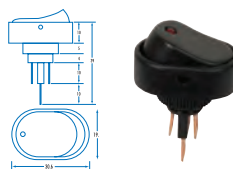


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SK-0962	\$2.95	\$2.60	\$2.30

### SPST - ROCKER ACTUATOR

LED Illuminated - Red This is a classy switch. It is a rocker, but only needs a round 12mm hole (with 1mm flat). It is SPST and can handle a massive 30 amps at 12VDC. There is an LED in the actuator which lights from a 9 - 12V source.

- QC tab termination 6.8mm (PT-4507)

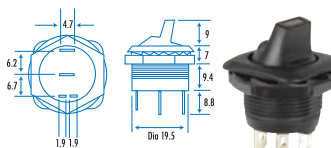


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 30A	SK-0955	\$4.95	\$4.45	\$3.90

### SPST - PADDLE

LED Illuminated red paddle type actuator with built in red LED

- Mounts easy in a 20mm hole
- 6A @ 250VAC
- LED requires 12V @ 20mA
- Black body
- QC tab termination 6.8mm (PT-4507)
- Solder tabs for LED

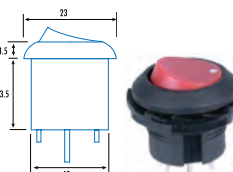


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SK-0964	\$4.95	\$4.45	\$3.90

### DPDT ROUND ACTUATOR - RED

This rocker mounts in a round 18mm hole.

- DPDT
- 6 amps @ 250VAC
- Black body, red actuator
- Solder pins
- 18mm mounting hole

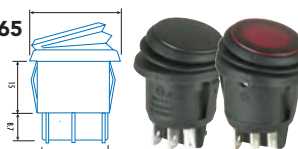


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A	SK-0994	\$4.95	\$4.45	\$3.90

### DPDT - ROUND ACTUATOR - IP65

DPDT round rocker switches with mini spade QC lugs. Sealed with a rubber boot and IP65 rated.

- 20mm mounting hole



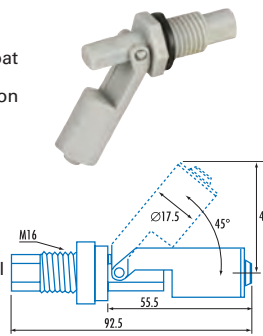
RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A Black	SK-0966	\$6.95	\$6.25	\$5.50
250VAC 6A Red - Illuminated	SK-0967	\$7.95	\$6.95	\$6.25

## FLOAT SWITCHES

### FLOAT SWITCH

VERTICAL OR HORIZONTAL MOUNT NO or NC. Ideal for use in conjunction with solenoid valves, water pumps, etc., this float switch can be made NO or NC (Normally Open or Normally Closed) by the orientation of the float. Horizontally mounted so the float falls, when the fluid level rises it will switch ON at maximum float height. Mounting the switch so the float rises upwards when the fluid level rises above switch height it will switch OFF. Vertical mounting, with the float down, will switch OFF at a high fluid level. Widely used in marine, automobile, industrial, agricultural fluid level sensing applications.

- 560mm wire leads
- 92.5(L)x 18(D)mm x M16



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
NO or NC	SF-0920	\$19.95	\$17.95	\$15.95

### TOP MOUNTING FLOAT SWITCH (LEVEL DETECTOR)

Ideal to control tank filling systems this vertical movement float switch fits quickly to the lid or top cover of a tank or other container. A mere 20mm travel distance for the float will trigger the switch ensuring you leave an air gap and don't overflow the vessel. Contacts are closed when the float is out of liquid and open when the float is elevated.

- Dimensions: 70(L) x 23(Dia)mm
- Contact Rating: 200V 500mA
- Mounting Diameter: 8mm



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
	SF-0922	\$17.95	\$15.95	\$14.35

## BELL PUSHBUTTONS

### SPST ILLUMINATED BELL PUSHBUTTON

This door bell button has a small globe mounted behind which illuminates the pushbutton and an area where you can place your name or street number. Supplied with 12V globe, which also works on lower voltage.

- Contact Arrangement SPST N.O.
- Globe in parallel with contacts



TYPE	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Pushbutton	SPST	SP-0782	\$7.95	\$6.95	\$6.25
Spare Globe	SPST	SL-2720	\$1.95	\$1.75	\$1.55

## LAMP STYLE PUSHBUTTON SWITCH

### 240V 2A BED LAMP STYLE PUSHBUTTON

Universal pushbutton switch suitable for replacing switches in some equipment. Also commonly used in small electronics projects such as school science experiments due to ease of connection using screw terminals

- 240V 2A rating
- Panel mounting hole: 10mm
- Maximum panel thickness: 2.5mm
- Pushbutton stem: 7(L) x 5(Dia.)mm
- Dimensions: 25(H) x 24(L) x 12(W)mm



TYPE	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Pushbutton	SPST	SP-0735	\$1.95	\$1.75	\$1.55

## Smart Hardware Competition:

- STEVE SARGENT, SHOPS AT JAYCAR LAUNCESTON

"Improving power in the back of the 4wd for our weekend getaways. This fuse block and fittings were all from Jaycar as they had what I needed."

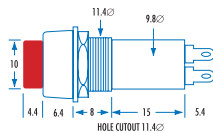


## PUSHBUTTON SWITCHES

### SPST SQUARE

Rated 3A 250VAC.

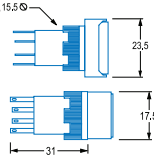
- Mounting hole 12mm



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
Push-on Momentary SPST Red	SP-0716	\$1.95	\$1.75	\$1.55
Push-on/Push off SPST Black Latching	SP-0718	\$1.95	\$1.75	\$1.55
Push-Off (N/C) SPST Momentary - Red	SP-0717	\$1.95	\$1.75	\$1.55

### DPDT ILLUMINATED - IP65

- Available in momentary or on/off action
- Rated for 250VAC 3A
- 12VDC LED illumination
- Mounting hole 15mm
- IP65 rated
- Contact arrangement DPDT N.O./N.C.

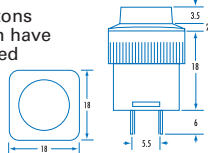


RATING	ACTION	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 3A	Momentary	Red	SP-0741	\$11.95	\$10.45	\$9.45
250VAC 3A	Push On Push Off	Red	SP-0745	\$13.95	\$12.45	\$10.95
250VAC 3A	Momentary	Green	SP-0747	\$11.95	\$10.45	\$9.45
250VAC 3A	Push On Push Off	Green	SP-0749	\$13.95	\$12.45	\$10.95

### SPST LED ILLUMINATED

These short bodied pushbuttons are available in 2 styles. Both have red LEDs behind a red diffused actuator.

- Rated at 1.5A 250VAC
- LED needs 2VDC @ 20mA

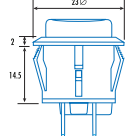


RATING	ACTION	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 1.5A	Momentary	SP-0706	\$5.95	\$5.25	\$4.75
250VAC 1.5A	Push On Push Off	SP-0704	\$5.95	\$5.25	\$4.75

### DPDT ROUND - IP56

IP56 rated round pushbutton switches.

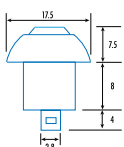
- QC spade lugs
- Push on/push off
- Mounting hole: 20mm dia



RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A DPST	Black	SP-0743	\$5.95	\$5.25	\$4.75
250VAC 6A DPST	Red Illuminated	SP-0751	\$6.95	\$6.25	\$5.50

### SPST DOME - IP67

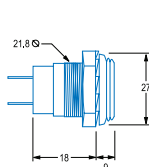
- IP67 rated
- Momentary action
- Mounting hole 12mm
- Contact arrangement SPST N.O.



RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
50V 100mA SPST	Black	SP-0656	\$4.95	\$4.45	\$3.90
50V 100mA SPST	Red	SP-0657	\$4.95	\$4.45	\$3.90

### SPST ROUND - IP65

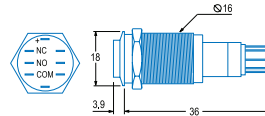
- Available in momentary or on/off action
- Rated for 14V 10A
- Mounting hole 22mm
- Contact arrangement SPST N.O.
- IP65 rated



RATING	COLOUR	ACTION	CAT.	Qty 1+	Qty 10+	Qty 25+
12V 10A	Black	Momentary	SP-0756	\$6.95	\$6.25	\$5.50
12V 10A	Red	Momentary Illuminated	SP-0757	\$8.95	\$7.95	\$6.95
12V 10A	Black	Push On Push Off	SP-0758	\$6.95	\$6.25	\$5.50
12V 10A	Red	Push On Push Off Illum	SP-0759	\$8.95	\$7.95	\$6.95

### DPDT ILLUMINATED - IP67

- DPDT (N.O./N.C.), on-off or momentary
- Rated for 250VAC @ 3A
- 12VDC LED illumination
- IP67 rated
- Mounting hole 16mm



RATING	COLOUR	ACTION	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 3A	Red	on - off	SP-0791	\$19.95	\$17.95	\$15.95
250VAC 3A	Green	on - off	SP-0792	\$19.95	\$17.95	\$15.95
250VAC 3A	Blue	on - off	SP-0793	\$19.95	\$17.95	\$15.95
250VAC 3A	Red	Momentary	SP-0796	\$17.95	\$16.15	\$14.35
250VAC 3A	Green	Momentary	SP-0797	\$17.95	\$16.15	\$14.35
250VAC 3A	Blue	Momentary	SP-0798	\$17.95	\$16.15	\$14.35

### DPDT DUAL COLOUR ILLUMINATED - IP67

Similar to the illuminated switches shown above, but illuminate red or green depending on the on-off state.

- DPDT (N.O./N.C.), on-off or momentary
- Rated for 250VAC @ 3A
- 12VDC LED illumination
- IP67 rated
- Mounting hole 16mm

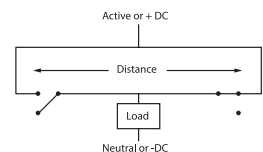


ACTION	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
Momentary	(Red to Green)	SP-0787	\$19.95	\$17.95	\$15.95
On-off	(Red to Green)	SP-0788	\$21.95	\$19.75	\$17.55

## Tech Talk: Alternative Switching

This circuit enables you to turn a load on or off (typically lighting) from either switch which may be a long way apart. The switches must be single pole, double throw types, minimum (SPDT).

Note! Only a qualified electrician can perform this wiring for 240V. You can do it yourself for low AC or DC voltage wiring.



### SPDT ILLUMINATED ARCADE BUTTON

Brightly coloured illuminated pushbutton switches ideal for creating a custom arcade machine, or even use as a large illuminated pushbutton for a control panel. Suits 25mm mounting hole.

- SPDT Microswitch for reliable operation
- All connections are 6.3mm spade
- Includes LED illumination suitable for 12V
- Red SP-0662
- Yellow SP-0664
- Green SP-0665
- Blue SP-0666
- White SP-0669



RATING	COLOUR	CAT.	Qty 1+	Qty 10	Qty 25
12V	Red	SP-0662	\$9.95	\$8.95	\$7.95
12V	Yellow	SP-0664	\$9.95	\$8.95	\$7.95
12V	Green	SP-0665	\$9.95	\$8.95	\$7.95
12V	Blue	SP-0666	\$9.95	\$8.95	\$7.95
12V	White	SP-0669	\$9.95	\$8.95	\$7.95

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!







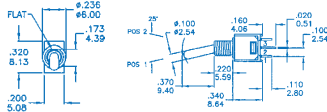
## Toggle Switches:

### SOANAR



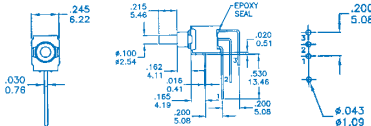
SPECIFICATIONS	SUB MINIATURE	MINIATURE
Electrical Life (Make - And - Break Cycles At Full Load)	30,000	40,000
Contact Resistance (@ 2 - 4VDC @ 100A)	20mΩ	10mΩ
Insulation Resistance (Any Contact to Body)	1000mΩ	1000mΩ
Dielectric Strength (@ Sea Level)	1000VRMS	1000VRMS
Contact Rating (With Resistive Load)	1A @ 250VAC	2A @ 250VAC
Contact Rating (With Resistive Load)	3A @ 28VAC	5A @ 28VAC

### SUB-MINIATURE SPDT - SOLDER TAG - THREADED BUSH



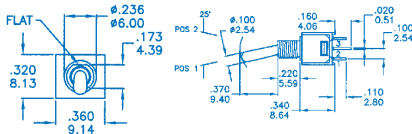
BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0300	\$2.95	\$2.60	\$2.30

### SPDT - HORIZONTAL PCB MOUNT (PUSHBUTTON) Momentary on when depressed.



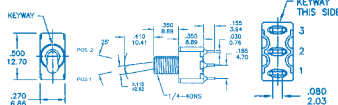
BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
SPDT (on-mom)	SP-0380	\$3.95	\$3.45	\$3.15

### DPDT - SOLDER TAG - THREADED BUSH



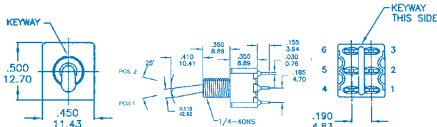
BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
DPDT (on - on)	ST-0310	\$2.95	\$2.60	\$2.30

### MINIATURE SPDT - SOLDER TAG WITH THREADED BUSH



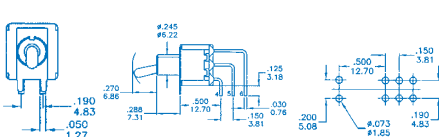
BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0335	\$2.95	\$2.60	\$2.30
SPDT Centre Off (on-off-on)	ST-0336	\$3.45	\$3.05	\$2.75

### DPDT - SOLDER TAG WITH THREADED BUSH



BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
DPDT (on - on)	ST-0355	\$3.75	\$3.30	\$2.95
DPDT Centre Off (on - off - on)	ST-0356	\$4.50	\$3.95	\$3.60
DPDT Mom Centre Off (mom-off-mom)	ST-0358	\$4.95	\$4.45	\$3.90
DPDT Mom (on - mom)	ST-0357	\$4.50	\$3.95	\$3.60

### DPDT - HORIZONTAL PCB MOUNT

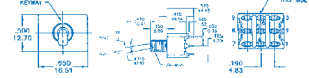


BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
DPDT Threaded Bush (on - on)	ST-0365	\$4.95	\$4.45	\$3.90

### MINIATURE (CONTINUED)

#### 3PDT MINI

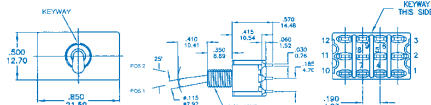
Hole cutout 6mm



BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
3PDT (on - on)	ST-0505	\$7.95	\$6.95	\$6.25

#### 4PDT MINI

Hole cutout 6mm

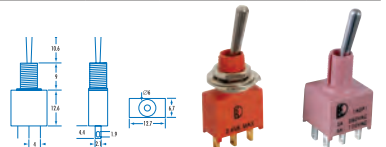


BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
4PDT (on - on)	ST-0506	\$8.95	\$7.95	\$6.95

### SEALED MINIATURE

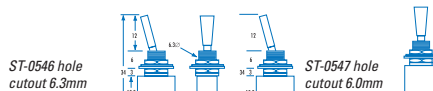
Ideal for use in wet or moist areas.

Rated at 2A, 250VAC.  
Splash post IP54 rated.



BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0554	\$6.95	\$6.25	\$5.50
DPDT (on - on)	ST-0555	\$7.95	\$6.95	\$6.25

### MINIATURE FLATTENED ACTUATOR

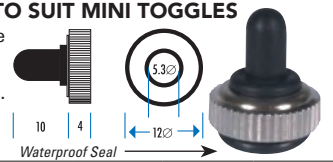


BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
SPDT (on - on)	ST-0546	\$5.50	\$4.90	\$4.30
DPDT (on - on)	ST-0547	\$5.95	\$5.25	\$4.75

### RUBBER BOOT WITH SEAL TO SUIT MINI TOGGLES

This waterproof hood replaces the standard mounting nut and has an integrated 'O' ring to seal your equipment from outside moisture.

- Suits our mini toggle switches
- True waterproof seal



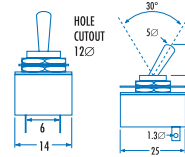
CAT.	Qty 1+	Qty 10+	Qty 25+
ST-0594	\$1.85	\$1.65	\$1.45

### STANDARD PANEL MOUNT TOGGLE SWITCHES

#### SPST

Body size 26 x 14mm,  
clearance 20.5mm.

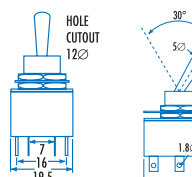
- Mounting hole 12mm
- Rated 2A 250V
- Solder terminals



BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A (on - off)	ST-0570	\$2.65	\$2.30	\$2.07

#### DPDT

- Body size 29.5 x 18mm
- Clearance 23mm
- Mounting hole 12mm
- Rated 3A 250V
- Solder terminals



BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 3A (on - off)	ST-0572	\$2.95	\$2.60	\$2.30

## Monthly Specials and Promotions:

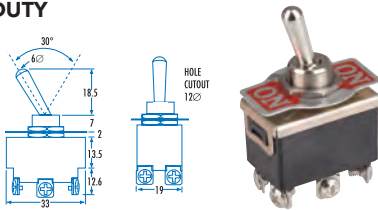
Lookout for our monthly promotions in store and online.

## TOGGLE SWITCHES (CONTINUED)

### DPDT - EXTRA HEAVY DUTY

Rated at 6A 250VAC, this switch will handle mains power switching.

- Screw terminals
- 12mm mounting hole

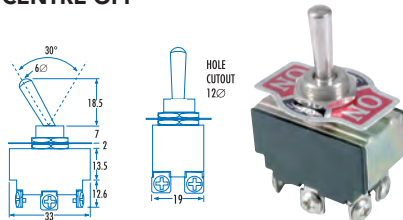


BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 6A (on - on) DPDT	ST-0575	\$4.95	\$4.45	\$3.90

### DPDT - HEAVY DUTY CENTRE OFF

Huge 10A 125V rating, chrome toggle with on/off indicator plate.

- DPDT centre off.
- Body size 35 x 20mm, clearance 26mm, mounting hole 12mm
- Screw terminals. Same physical size as ST-0575 above

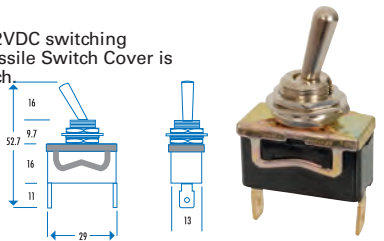


BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
125VAC 10A (on - off - on) DPDT	ST-0576	\$4.95	\$4.45	\$3.90

### SPST

Ideal for any high current 12VDC switching application. Our ST-0578 Missile Switch Cover is perfectly suited to this switch.

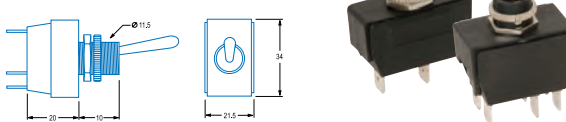
- Body size 29.5 x 17mm
- Mounting hole 12mm
- Rated 20A 12VDC



BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 20A Momentary (off - mom)	ST-0577	\$6.50	\$5.75	\$4.95
12VDC 20A Toggle (on - off)	ST-0579	\$5.95	\$5.25	\$4.75

### HEAVY DUTY TOGGLE

- Mounting hole 11.5mm
- UL61058 rating: 12(4)A 250VAC
- ST-0586 is Centre-Off



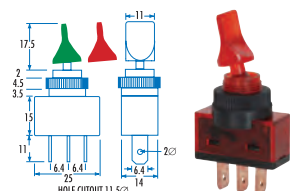
12VDC	277VAC		CAT.	Qty 1+	Qty 10+	Qty 25+
20A	20A	SPST	ST-0581	\$4.95	\$4.45	\$3.90
20A	20A	SPST	ST-0583	\$5.45	\$4.90	\$4.30
20A	16A	DPDT	ST-0585	\$7.95	\$6.95	\$6.25
20A	16A	DPDT - C/Off	ST-0586	\$7.95	\$6.95	\$6.25

### 12V SPST ILLUMINATED DUCKBILL ACTUATOR

Actuator illuminates when switch is on.

Two colours available.

- Rated at 12VDC 10A SPST
- QC tab termination 6.8mm (PT-4507)

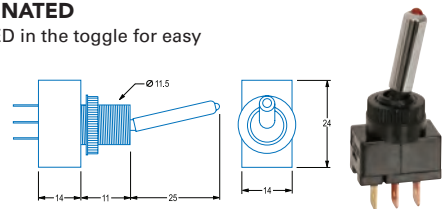


BRACKETS INDICATE SWITCH POSITION	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 10A Red (on - off) SPST	ST-0580	\$3.95	\$3.45	\$3.15
12VDC 10A Green (on - off) SPST	ST-0582	\$3.95	\$3.45	\$3.15

### 12V SPST ILLUMINATED

Illuminated by an LED in the toggle for easy identification.

- Illuminated red
- Rated for 12VDC 20A
- Mounting hole 11.5mm

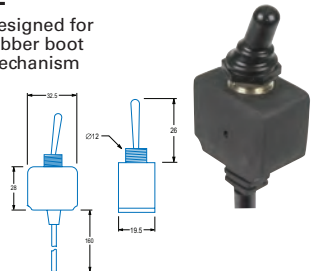


	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 20A SPST	ST-0587	\$5.95	\$5.35	\$4.75

### SPST 24V 15A SEALED TOGGLE

This large toggle switch is specially designed for marine conditions. A weatherproof rubber boot covers the actuator, and the switch mechanism is encapsulated in rubber. For this reason, 150mm fly leads are attached instead of the usual terminals. Not only limited to marine use, it can also be used as an ultra-durable switch in many applications.

- Ideal for marine or automotive use
- Max volt rating: 24V @ 15 amps



	CAT.	Qty 1+	Qty 10+	Qty 25+
24VDC 15A SPST	ST-0574	\$12.95	\$11.35	\$10.35

### MISSILE SWITCH PROTECTIVE COVER

Military style missile switch cover featuring a heavy duty hinged, spring return protective cover. Covers turn switch off when snapped down. Fit any toggle switch with a 12mm mounting hole and appropriate length actuator.

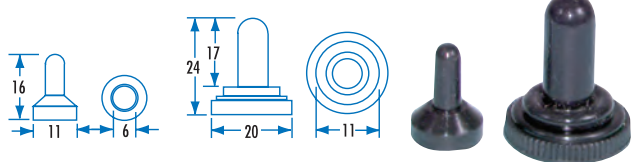
Switch (cat. ST-0579) shown mounted in missile cover (switch not included).

When cover is down, actuator cannot move.



	CAT.	Qty 1+	Qty 10+	Qty 25+
Red	ST-0578	\$6.95	\$6.25	\$5.50
Carbon Fibre Style	ST-0584	\$9.95	\$8.95	\$7.95

### SPLASHPROOF HOODS FOR TOGGLE SWITCHES



These hoods simply screw over the toggle switch to deter ingress of water.

### MINIATURE - INCLUDES NUTS FOR BOTH MINI & ULTRA-MINI TOGGLE SWITCHES.

	CAT.	Qty 1+	Qty 10+	Qty 25+
	ST-0590	\$1.85	\$1.65	\$1.45

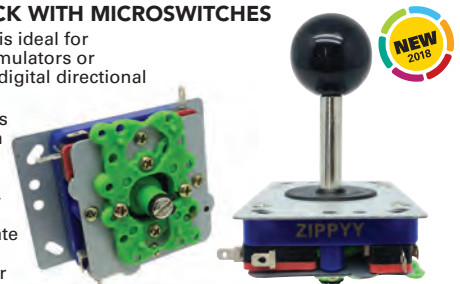
### STANDARD (LARGE)

	CAT.	Qty 1+	Qty 10+	Qty 25+
	ST-0592	\$2.85	\$2.53	\$2.23

### ARCADE JOYSTICK WITH MICROSWITCHES

Solidly built joystick is ideal for arcade games and emulators or anything that needs digital directional controls.

- SPST Microswitches for reliable operation
- Adjustable restrictor plate with options for 2 way, 4 way and 8 way
- Metal mounting plate and main shaft
- Removable knob for easy mounting



	CAT.	Qty 1+	Qty 10	Qty 25
Arcade Joystick	SM-1052	\$19.95	\$17.95	\$15.95



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!



## TAMPER SWITCHES

### ALARM TAMPER STYLE

This switch mounts behind an alarm module, bell or other item. If the device is tampered with or pulled from the wall, the alarm will be triggered. SPST. 18mm mounting hole. Contacts close when button depressed.



	CAT.	Qty 1+	Qty 10+	Qty 25+
SPST	Each LA-5066	\$2.95	\$2.60	\$2.30

### TAMPER (PIN) STYLE - 2 PACK

Low cost spring loaded switch, simply make to frame (or earth) when pin is released i.e. by operating car or cabinet door, etc. 57mm overall, 12mm pin travel.

- Bullet connector termination



	CAT.	Qty 1+	Qty 4+	Qty 8+
Pack of 2	LE-8775	\$5.95	\$5.25	\$4.75

### VAN SLIDING DOOR STYLE

Double action sliding door switch, primarily designed for van doors and tailgates. Supplied with rubber mounting plates, screws, template stickers and installation instructions.

- Contacts are rated at a massive 20A @ 12V



RATING	CAT.	Qty 1+	Qty 2+	Qty 4+
12VDC 20A	Each LE-8779	\$18.95	\$16.95	\$14.95

### METAL TAMPER (PIN) STYLE - 2 PACK

Ideal for car bonnets, this heavy duty pin switch is nickel plated for protection from corrosion. The plunger is plastic and can be cut to suit the required length/depth. Supplied with locking nuts and star washer. The bezel's mounting depth is also adjustable. Termination is via a 6.4mm spade lug.

- Length (main body): 38mm
- Locking nut size: 12mm
- Including plug & lug: 70mm
- Travel (max): 13.5mm
- Shaft diameter: 7.75mm
- Fascia nut size: 11mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
Pack of 2	LE-8776	\$7.95	\$6.95	\$6.25

### METAL FASCIA INSET PIN SWITCH - 2 PACK

Inset pin switch with plated metal fascia. Suitable for many cars as a replacement door switch. The sturdy plunger can be cut to required length. Termination via right angle 6.4mm spade lug.

- Fascia: 34.5 x 16.5mm
- Pin: 27(L) x 8(dia)mm
- Overall depth: 51mm
- Travel (max): 8mm
- Depth Behind Fascia: 15mm (not incl. lug & pin)



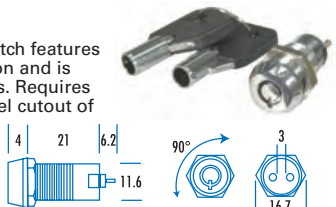
	CAT.	Qty 1+	Qty 2+	Qty 4+
Pack of 2	LE-8777	\$7.95	\$6.95	\$6.25

## BARREL LOCKS

### SPST BARREL KEY, MINI

Chrome plated SPST mini key switch features spring return momentary operation and is supplied with two mini barrel keys. Requires 28mm mounting depth and a panel cutout of 12mm.

- Contact rating: 0.5A @ 250VAC / 1A @ 125VAC

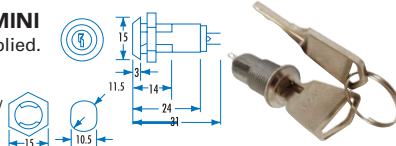


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 500mA	SPST SM-1034	\$9.95	\$8.75	\$7.75

### SPST STANDARD KEY, MINI

Rated at 3 amps. 2 keys supplied.

- Panel cutout 12mm
- Mounting depth 29mm
- Contact rating: 1A 125VAC / 0.5A @ 250VAC

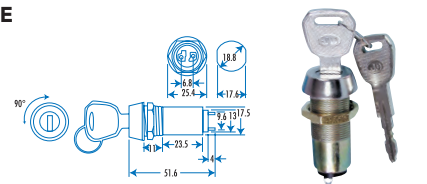


RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
125VAC 1A	SPST SM-1027	\$9.95	\$8.75	\$7.75

### SPST STANDARD SIZE

Solid barrel type.

- 19mm mounting hole
- SPST action
- Supplied with 2 keys
- Rated @ 250V 2A

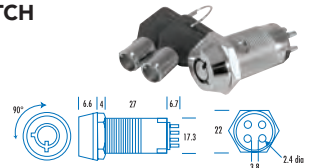


	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A				
Random Keys	SM-1030	\$12.95	\$11.35	\$10.35
Keyed Alike	Type A SM-1029	\$12.95	\$11.35	\$10.35
Keyed Alike	Type B SM-1031	\$12.95	\$11.35	\$10.35

### DPST CHANGE-OVER KEY SWITCH

Uses tubular keys with black plastic inserts to easily identify them. It has 2 positions and the key is removable from both. There are 4 connection terminals, is a change-over type - i.e. connection DPST.

- Contact rating: 2A, 250VAC.



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 2A	SM-1032	\$13.95	\$12.35	\$10.95

## MERCURY & REED SWITCHES

### SPST MINI MERCURY

With a robust plastic housing, this switch has a mounting tab - you can screw it down - or use the self adhesive strip supplied. It has a 30cm lead. Switch contacts are open when the device is mounted horizontally. Dimensions: 33(L) x 8(W) x 8.5(D)mm.



	CAT.	Qty 1+	Qty 10+	Qty 25+
SPST	SM-1044	\$4.45	\$3.95	\$3.45

### SPST MERCURY SWITCH

Glass encapsulated

- 125VAC 3 amp AC. SPST
- Size glass 18(L)mm x 5.5mm dia

Coin not included for size purposes only.



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
125VAC 3A	SPST SM-1035	\$2.75	\$2.45	\$2.15

### NC REED SWITCH\*

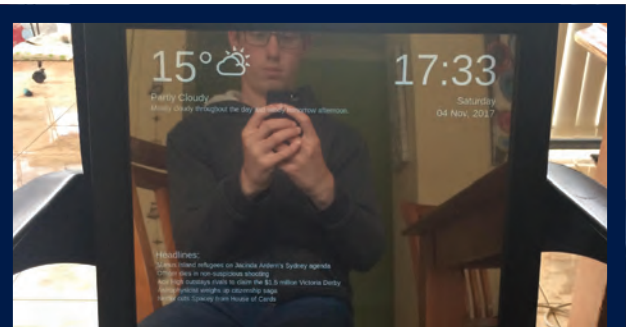
Ideal for burglar alarms.

- Total length: 44mm
- Glass length: 14mm
- Contact rating: 10W
- Switching voltage: 200VDC (max)
- Switching current: 0.5A (max)
- Carrying current: 1.0A (max)

\*Normally open, but closed when near magnet



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
200VDC 500mA	SM-1002	\$1.95	\$1.75	\$1.55



## Smart Hardware Competition:

- SPENCER HALSE,  
SHOPS AT JAYCAR FRANKSTON

"I built a smart mirror. Making use of a Raspberry Pi Zero W as the brain, this is the proof of theory I am using to build a streamlined modern version next."



## TACTILE SWITCHES

### SPST MICRO

SPECIFICATIONS	ALL MODELS
Rating	12VDC 50mA
Operating Temp	-20~70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100mΩ Min at 100VDC
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	SPST N.O.
Action	Momentary

#### VERTICAL MOUNT



"A" - Actuator Height



#### RIGHT-ANGLE VERSION



"A" - Actuator Height



VERTICAL MOUNT	ACTUATOR	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	0.7mm	SP-0600	\$0.95	\$0.85	\$0.75
12VDC 50mA	1.4mm	SP-0601	\$0.95	\$0.85	\$0.75
12VDC 50mA	3.5mm	SP-0602	\$0.95	\$0.85	\$0.75
12VDC 50mA	6.0mm	SP-0603	\$0.95	\$0.85	\$0.75

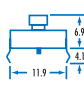
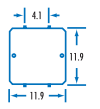
RIGHT ANGLE		CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	0.7mm	SP-0604	\$1.00	\$0.90	\$0.80
12VDC 50mA	1.4mm	SP-0605	\$1.00	\$0.90	\$0.80
12VDC 50mA	3.5mm	SP-0606	\$1.00	\$0.90	\$0.80
12VDC 50mA	6.0mm	SP-0607	\$1.00	\$0.90	\$0.80

### SPST PCB MOUNT

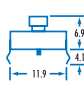
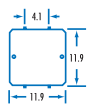
SPECIFICATIONS	BOTH MODELS
Rating	12VDC 50mA
Operating Temperature	20~70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ Min. at 100VDC

Withstand Voltage:  
250VAC for 1 minute  
Contact Arrangement:  
SPST N.O  
Momentary action

#### SQUARE



#### ROUND

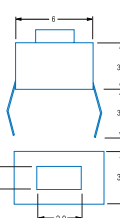


See website for full data sheet.

RATING	ACTION	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	Square	SP-0608	\$1.25	\$1.10	\$0.97
12VDC 50mA	Round	SP-0609	\$1.25	\$1.10	\$0.97

### SPST PCB - 2 PIN

SPECIFICATIONS	SP-0611
Rating	12VDC 50mA
Operating Temperature	-16~60°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	2 pin SPST N.O
Action	Momentary
Size	6 x 3.5 x 3.5mm



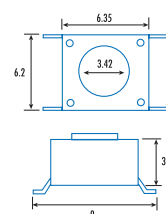
RATING	ACTION	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	PCB Mount	SP-0611	\$0.95	\$0.85	\$0.75

### SPST SMD - PACK OF 10

This switch is similar to SP-0600 but surface mount.

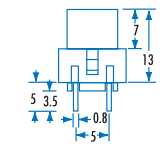


SPECIFICATIONS	SP-0610
Size	6x6mm
Height	3.85mm
Contact Arrangement	SPST N.O.
Contact Rating	50mA, 12VDC
Contact Resistance	100mΩ max



RATING	ACTION	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	Pkt 10	SP-0610	\$13.95	\$12.35	\$10.95

### SPST PCB MOUNT SNAP ACTION - ROUND



PCB Mount, single pole, momentary. Suitable for keyboards, security systems, etc. Available in 5 colours.

• These switches are normally open SPST. When button is depressed the switch closes, but only while the button is down

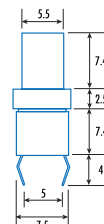
• Contact rating 10mA/35VDC. Pin spacing 5mm

RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
35VDC 10mA	Red	SP-0720	\$1.45	\$1.30	\$1.15
35VDC 10mA	Black	SP-0721	\$1.45	\$1.30	\$1.15
35VDC 10mA	Yellow	SP-0722	\$1.45	\$1.30	\$1.15
35VDC 10mA	White	SP-0723	\$1.45	\$1.30	\$1.15
35VDC 10mA	Green	SP-0724	\$1.45	\$1.30	\$1.15

### SPST PCB MOUNT WITH LED

- Vertical
- Metallic look

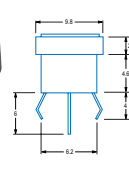
SPECIFICATIONS	ALL MODELS
Rating	12VDC 50mA
Operating Temperature	-50 ~ 70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ min at 100VDC
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	SPST N.O.
Action	Momentary
LED Power Supply	3.5-4VDC @ 25mA



RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	Red	SP-0612	\$4.45	\$3.95	\$3.45
12VDC 50mA	Green	SP-0613	\$4.45	\$3.95	\$3.45
12VDC 50mA	Blue	SP-0614	\$4.45	\$3.95	\$3.45

### SPST PCB MOUNT - VERTICAL WITH LED 9.8

SPECIFICATIONS	BOTH MODELS
Rating	12VDC 50mA
Operating Temperature	-50 ~ 70°C
Contact Resistance	100mΩ Max.
Insulation Resistance	100MΩ min at 100VDC
Withstand Voltage	250VAC for 1 minute
Contact Arrangement	SPST N.O.
Action	Momentary
LED Power Supply	3.5-4VDC @ 25mA



RATING	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
12VDC 50mA	Red	SP-0620	\$3.95	\$3.45	\$3.15
12VDC 50mA	Green	SP-0621	\$3.95	\$3.45	\$3.15
12VDC 50mA	Blue	SP-0622	\$3.95	\$3.45	\$3.15

## Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.



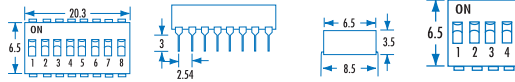
To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.



## DIP SWITCHES

### DIP SWITCHES

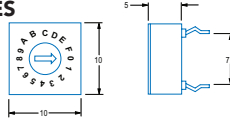
- End stackable
- Moulded 0.3" IC packing outline for automatic insertion
- Smaller sized
- Twin contact design
- Gold plated contact & tin plated terminals
- Switching: 25mA 24VDC
- Non-Switching: 100mA 50VDC
- Contact Resistance: Initial 50mΩ max
- Dielectric Strength: 500VDC min 1 minute



TYPE	DESCRIPTION	CAT.	Qty 1+	Qty 10+	Qty 25+
2 Way	4 pin DIP	SM-1012	\$1.55	\$1.35	\$1.20
3 Way	6 pin DIP	SM-1013	\$1.75	\$1.55	\$1.40
4 Way	8 pin DIP (low profile)	SM-1020	\$1.95	\$1.75	\$1.55
6 Way	12 pin DIP	SM-1015	\$2.15	\$1.90	\$1.70
8 Way	16 pin DIP (low profile)	SM-1024	\$2.40	\$2.15	\$1.90
10 Way	20 pin DIP	SM-1017	\$2.65	\$2.30	\$2.07
12 Way	24 pin DIP	SM-1018	\$2.90	\$2.60	\$2.30

### BINARY CODED DIL ROTARY SWITCHES

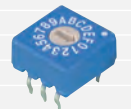
These tiny switches are designed for PCB use. These pins are moulded in and fully sealed. The body is moulded in UL 94V-0 flame-retardant plastic.



#### SPECIFICATIONS

#### BOTH MODELS

<b>Contact Rating</b>	Switching 25mA@24VDC
<b>Non Switching</b>	100mA @50VDC (dry contact switching)
<b>Contact Resistance</b>	100mΩ max
<b>Insulation Resistance</b>	1,000MΩ (min) at 100VDC
<b>Dielectric Strength</b>	250VAC for 1 minute
<b>Temp (Operating)</b>	-25°C to +70°C
<b>Max Rotational Torque Required</b>	500gf-cm
<b>Operational Life</b>	2,000 steps/min, switching
<b>Solderability After flux</b>	230 +/-5°C for 5 +/- 0.5 sec

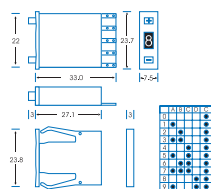


BINARY CODED HEX	CAT.	Qty 1+	Qty 10+	Qty 25+
0 through F output	SR-1220	\$3.95	\$3.45	\$3.15

BINARY CODED DECIMAL	CAT.	Qty 1+	Qty 10+	Qty 25+
0 through 9 output	SR-1222	\$3.95	\$3.45	\$3.15

### 0 - 9 BCD PUSHWHEEL

These push-wheel switches can be ganged together to make any combination and can be panel mounted using the optional pair of end caps (SR-1254). Switch positions (0 - 9) indicated via large numbers (white on black) and outputs are BCD encoded. Optional spacers (SR-1256) can be ganged together to provide spacing (7.62mm each) between the switches.



CAT. SR-1250  
0 - 9 PUSHWHEEL  
SWITCH



CAT. SR-1256  
SPACER



CAT. SR-1254  
END CAPS TO  
SUIT (PAIR)

SPECIFICATIONS	SR-1250
<b>Rating</b>	50VAC / 28VDC Max
<b>Switching Current</b>	100mA Max
<b>Continuous Current</b>	500mA Max
<b>Contact Resistance</b>	200m Ω Max (initial)
<b>Insulation Resistance</b>	100M Ω Min
<b>Dielectric Strength</b>	500VAC 1 minute
<b>Operating Temperature</b>	-20°C to +65°C
<b>Ambient Humidity</b>	75% RH Max
<b>Mechanical Life</b>	200,000 steps Min
<b>Electrical Life</b>	100,000 steps Min

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
Switch	SR-1250	\$9.95	\$8.75	\$7.75
Spacer	SR-1256	\$2.45	\$2.15	\$1.95
End caps - Pair	SR-1254	\$2.45	\$2.15	\$1.95

### SEALED PCB ROTARY SWITCHES

These switches have a removable ring with tab which can be inserted into the switch several ways to your particular requirements. For example, if you purchased a 1 pole x 12 way (max) switch you could convert it to, say, 1 pole 7 way between stops. They have a standard 1/4" shaft. Panel hole 10mm. Contact rating 150mA at 240VAC. Cutout 9.5mm.



#### 1 POLE

Configured from 1 pole 2 position through to 1 pole 12 position.

#### 2 POLE

From 2 pole 2 position to 2 pole 6 position

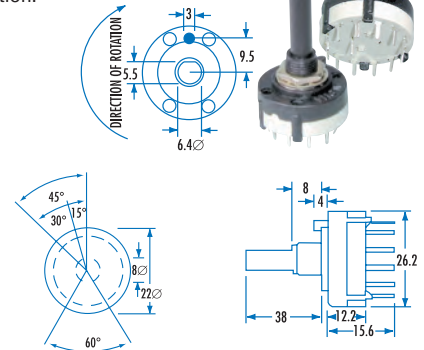
#### 3 POLE

From 3 pole 2 position to 3 pole 4 position

#### 4 POLE

4 pole, 2 and 3 position

- Break before make



RATING	TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC 150mA	1 pole	SR-1210	\$3.95	\$3.45	\$3.15
240VAC 150mA	2 pole	SR-1212	\$3.95	\$3.45	\$3.15
240VAC 150mA	3 pole	SR-1214	\$3.95	\$3.45	\$3.15
240VAC 150mA	4 pole	SR-1216	\$3.95	\$3.45	\$3.15

### ROTARY ENCODER WITH PUSHBUTTON

Quadrature encoded rotary encoder with pushbutton can be used to provide an intuitive interface to your next project. Similar to the interface found on many 3D Printers. PCB mount with five terminals. Thirty detents/ fifteen pulses per revolution. Encoder has two SPST contacts sharing a common, pushbutton switch is SPST/NO.



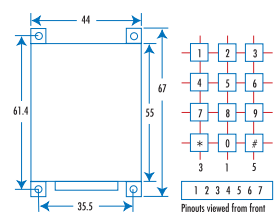
- Shaft with flat for grub screw
- Three terminals for rotary encoder
- Two independent terminals for pushbutton
- Two large mechanical lugs for PCB mounting



	CAT.	Qty 1+	Qty 10+	Qty 25+
Rotary Encoder with Pushbutton	SR-1230	\$9.95	\$8.95	\$7.95

### 12 KEY NUMERIC KEYPAD

This telephone style keypad has many uses. It has 0-9, \*, # - 3 x 4 way matrix.



SPECIFICATIONS	SP-0770
<b>Contact Rating</b>	20mA, 24VDC
<b>Contact Resistance</b>	200Ω max
<b>Life</b>	1,000,000 cycles per key
<b>Contact</b>	Conductive rubber
<b>Dimensions (Key Face)</b>	44(W) x 54(H) x 5(D)mm
<b>Colour</b>	White keys on black background

RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
24VDC 20mA	SP-0770	\$8.95	\$7.95	\$6.95

## Attention Educators! Can we Help?

If you're a parent or teacher and would like some practical resources or help, then your local Jaycar Store or Stockist can assist you with a wide range of learning projects for all ages.





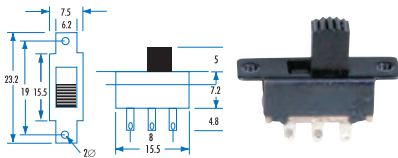
## Slide Switches:

These slide switches have silver plated contacts, contact ratings of 0.3A @ 100V min, 25mΩ contact resistance, 100MΩ plus insulation resistance (at 500VDC) & endure about 10,000 cycles.

### DPDT PANEL MOUNT SUB MINIATURE

Break before make (non shorting contacts).

- Size 23(L) x 7(W)mm
- Actuator height 5mm
- Mounting holes 19mm apart
- Screws to mount switch use Cat. HP-0390

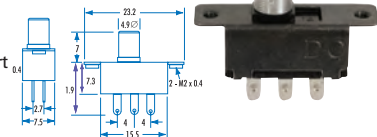


	CAT.	Qty 1+	Qty 10+	Qty 25+
100V 300mA DPDT	SS-0852	\$1.45	\$1.30	\$1.15

### DPDT PANEL MOUNT SUB MINIATURE

(Spun aluminium actuator)

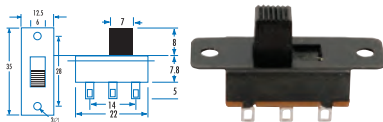
- Panel mount
- Size 23(L) x 7(W)mm
- Actuator height 7mm
- Mounting holes 19mm apart



	CAT.	Qty 1+	Qty 10+	Qty 25+
100V 300mA DPDT	SS-0812	\$1.45	\$1.30	\$1.15

### DPDT PANEL MOUNT MINIATURE

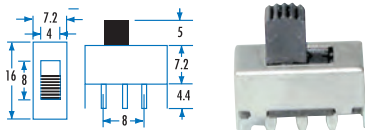
- Size 35(L) x 13(W)mm
- Actuator height 6mm
- Mounting holes 28mm apart
- 3mm diameter holes for screws



	CAT.	Qty 1+	Qty 10+	Qty 25+
100V 300mA DPDT	SS-0821	\$1.25	\$1.10	\$0.97

### DPDT PCB MOUNT SUB MINIATURE

- Size 16(L) x 7.2(W)mm
- Actuator height 5mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
100V 300mA DPDT	SS-0823	\$1.45	\$1.30	\$1.15

### SPDT MICRO SLIDE SWITCH

This is the tiniest slide switch we have ever seen, and we're sure it will be a great addition for all those projects that need a small on-off switch. The 0.1" pitch suits protoboard and even breadboards, and allows multiple switches to be stacked side-by-side if needed.

- 0.2A at 24V, 0.5A at 12V
- 6.5mm body height
- 5mm lead length- long enough to bend for right angle mounting
- SPDT (centre common) for changeover contacts
- 11.5mm x 10mm x 2.5mm



	CAT.	Qty 1+	Qty 10	Qty 25
	SS-0834	\$1.50	\$1.35	\$1.20

### INLINE JST SWITCH KIT

JST switches and connectors provide an unobtrusive solution to power control. They are small so will fit comfortably in the chassis of an RC vehicle. This kit includes a JST switch with a male and female JST connector on each end attached to a 140mm wire. Great for hobby applications such as model trains, remote control helicopters and cars, or simple around the house projects that require discrete and simple switching.

- Includes mounting bracket and screws
- Switch dimensions: 25(L) x 25(H) x 9(D)mm

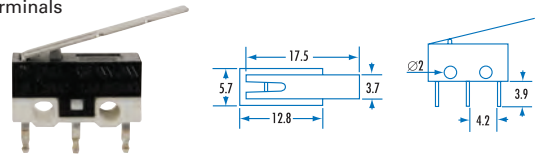


	CAT.	Qty 1+	Qty 10+	Qty 50+
	SS-0826	\$3.95	\$3.45	\$3.15

## MICRO SWITCHES

### SPDT SUBMINIATURE

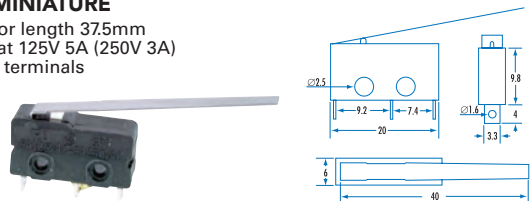
- Actuator length 14mm
- Rated at 125V 3A
- Solder terminals



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
125V 3A SPDT On - On	SM-1036	\$3.95	\$3.45	\$3.15

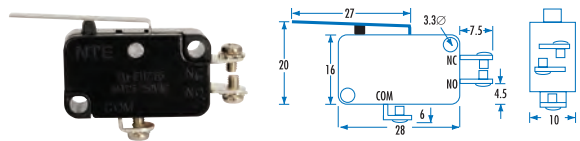
### SPDT MINIATURE

- Actuator length 37.5mm
- Rated at 125V 5A (250V 3A)
- Solder terminals



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
125V 3A SPDT On - On	SM-1038	\$4.95	\$4.45	\$3.90

### SPDT STANDARD



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
240VAC 10A SPDT On - On	SM-1040	\$3.75	\$3.30	\$2.95

### SPDT STANDARD MICRO SWITCH

Standard sized micro switch without lever, ideal for those applications where a lever is not needed, and a simple button is all that is required. Suits SP0662, SP0664, SP0665, SP-0666 and SP-0669 Arcade Pushbuttons.

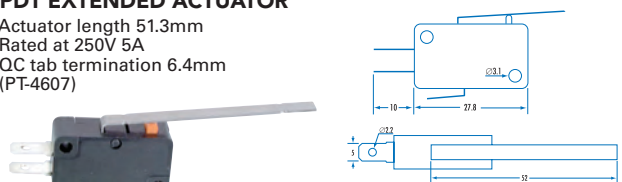
- SPDT (Changeover) contacts rated at 5A, 240V



	CAT.	Qty 1+	Qty 10	Qty 25
	SM-1050	\$3.50	\$3.15	\$2.80

### SPDT EXTENDED ACTUATOR

- Actuator length 51.3mm
- Rated at 250V 5A
- QC tab termination 6.4mm (PT-4607)



RATING	CAT.	Qty 1+	Qty 10+	Qty 25+
250VAC 5A SPDT On - On	SM-1039	\$3.75	\$3.30	\$2.95

Addicted to Social?  
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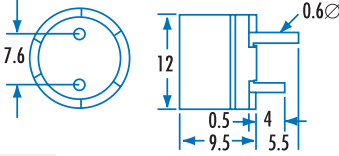


youtube.com/user/JaycarVideo

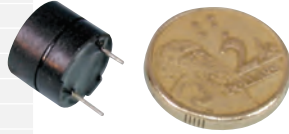
## PIEZO BUZZERS

### PCB MOUNT MINI PC PIEZO

Ideal when you need to fit an alarm in a small place. It has its own built-in drive circuit. It offers low current consumption and it's sealed for DIP soldering & washing.

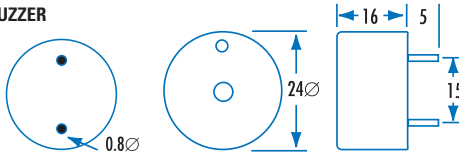


SPECIFICATIONS	AB-3459
Operating Voltage	9 - 14V
Rated Voltage	12VDC
Current	30mA
SPL	85dB/10cm
Frequency	2.3kHz
Weight	2.4 gram

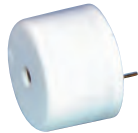


DIA.	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
12mm	9.5mm	AB-3459	\$4.95	\$4.45	\$3.90

### PCB MOUNT PIEZO BUZZER



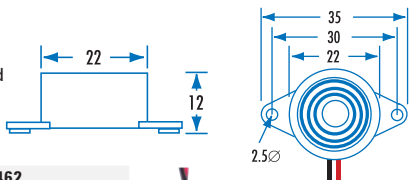
SPECIFICATIONS	AB-3458
Operating Voltage	3 - 30VDC
Operating Freq	3.8 kHz
Current Draw	16mA max
SPL	85dB/30cm/12V



DIA.	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
24mm	16mm	AB-3458	\$3.95	\$3.45	\$3.15

### PIEZO BUZZER - MINI

It offers medium to loud sound output, low current consumption and is extremely durable. Supplied with fly leads.



SPECIFICATIONS	AB-3462
Operating Voltage	3-16VDC
Rated	12VDC
Freq	3.3kHz
Max Current at 12V	15mA
SPL	90dB

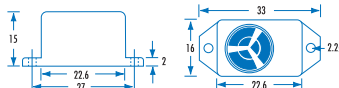


DIA.	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
22mm	12mm	AB-3462	\$3.95	\$3.45	\$3.15

### SURFACE MOUNT BUZZER

Handy solid state buzzer operates between 5-15VDC. Used in many applications.

Note: This is an electro-mechanical buzzer.



SPECIFICATIONS	AB-3452
Operating Voltage	5-15VDC
Rated	12VDC
Max Current at 12V	40mA
SPL	79dB/1m



DIA.	WIDTH	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
31mm	16mm	15mm	AB-3452	\$3.95	\$3.45	\$3.15

See page 487 for Tech Tip on Decibels

## Tell a Friend:

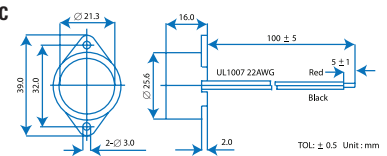
If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

Catalogue Department - Jaycar Electronics:  
catalogue@jaycar.com

### WEATHERPROOF BUZZER 6-14VDC

Designed to withstand exposure to rain when mounted outdoors.

- Material: ABS UL-94 1/16" HB High Heat



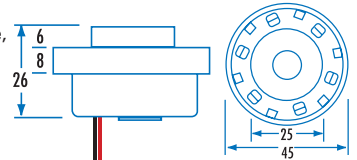
SPECIFICATIONS	AB-3466
Operating Voltage	6-14VDC
Rated Voltage	12VDC
Current	35mA @ 12V (max)
SPL	85dB / 1m
Frequency	2.8kHz 500Hz



DIA.	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
26mm	16mm	AB-3466	\$16.95	\$14.95	\$13.35

### DUAL SOUND PIEZO INDUSTRIAL TYPE

Similar to SONALERT® earpiercing sound. Non inductive, operates from 1 - 13VDC. Now with both continuous tone and pulsed tone. Red & black for continuous, yellow & black for pulse tone. Ideal for most signalling applications.



SPECIFICATIONS	AB-3456
Operating Voltage	1 - 13VDC
Rated Voltage	12VDC
Current	Single tone 35mA, pulse 20mA
Frequency	2.9kHz
SPL	105dB/30cm single, 100dB/30cm pulse
Pulse Rate	2 - 7 pulse/sec
Mounting	1 x 3mm screw

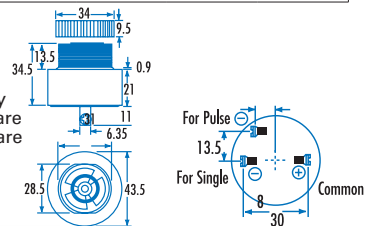


DIA.	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
45mm	26mm	AB-3456	\$8.95	\$7.95	\$6.95

### PIEZO REVERSING ALARM AUTOMOTIVE TYPE

Available with both continuous and pulse tone. These are a heavy duty panel mounted piezo. They are very rigidly made and terminals are via screw down or 6.35mm quick disconnect.

- Similar to SONALERT®



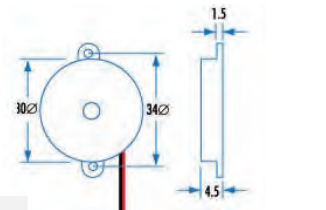
SPECIFICATIONS	AB-3464
Operating voltage	4 - 16V
Rated voltage	12V
Max Current @ 12V	25 single, 20 pulse mA
Frequency	2.9kHz
SPL @ 12V	95 single, 90 pulse dB
Pulse Rate @ 12V	0.8 - 1.2 pulse/sec
Mounting Hole	29mm



DIA.	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
43.5mm	34.5mm	AB-3464	\$12.95	\$11.35	\$10.35

### LOW PROFILE PIEZO TRANSDUCER

This electro-acoustic transducer contains no electronics but will transform AC voltages to sound pressure waves. It will also generate an AC voltage across its terminals when stimulated with a sound pressure wave.



SPECIFICATIONS	AB-3440
Max. Input Voltage	30V pp
SPL	105dB/30cm pulse
Resonant Frequency	4,200 +/-500Hz
Resonant Resistance	300 Ω max.
Electrostatic Capacitance	20,000pf +/-30%.



DIA.	HEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
30mm	5mm	AB-3440	\$3.95	\$3.45	\$3.15



## ABS Instrument Cases With Purge Valves:

These robust cases come with purge valves for an airtight seal, ribbed ABS construction, stainless steel hinge pins, O-ring seals and very solid catches. The lids are lined with removable egg-shell foam and they come with pluck foam insert with an extra layer of egg-shell foam. Ideal for your camera gear, test, medical or scientific equipment.



WARRANTY



HB-6389

### ABS INSTRUMENT CASE MPV0

Features extremely strong catches with metal pins, it's sealed with a rubber gasket, and inside is pluck foam to shape the internal storage space for a specific object. Lanyard included. Cat. HB-6389



HB-6388

### ABS INSTRUMENT CASE MPV1

Tiny size for small instruments or test equipment. Cat. HB-6388



HB-6381

### ABS INSTRUMENT CASE MPV2

Small size for a single SLR camera, DMM or other test equipment. Cat. HB-6381



HB-6383

### ABS INSTRUMENT CASE MPV4

Medium size to take extra camera and lenses or larger gear such as oscilloscopes or multiple pieces of test equipment. Cat. HB-6383



HB-6385

### ABS INSTRUMENT CASE MPV7

Large size. This case also has moulded slots to take dividers and two layers of pluck foam. It's also deep enough to take a pro SLR camera body. Cat. HB-6385



HB-6387

### ABS INSTRUMENT ROLLING CASE MPV8

Ideal for the travelling professional. Like a conventional piece of luggage, it has a retractable handle and built-in wheels to take the load. It's also carry-on size. Cat. HB-6387

	INTERNAL - W X D X H(mm)	EXTERNAL - W X D X H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
MPV0	164 x 119 x 40	173 x 125 x 50	HB-6389	\$24.95	\$22.35	\$19.70
MPV1	186 x 123 x 75	210 x 135 x 90	HB-6388	\$39.95	\$35.95	\$31.95
MPV2	300 x 220 x 90	330 x 280 x 120	HB-6381	\$69.95	\$62.95	\$55.95
MPV4	395 x 320 x 117	430 x 380 x 154	HB-6383	\$99.95	\$89.95	\$79.95
MPV7	480 x 355 x 186	515 x 415 x 200	HB-6385	\$129.00	\$115.95	\$102.95
MPV8	510 x 292 x 175	530 x 355 x 225	HB-6387	\$189.00	\$169.95	\$150.95

## ABS INSTRUMENT CASES

### PLASTIC INSTRUMENT CASE

- Modern design case in matt finish surface
- Ideal for desktop instruments
- Top and base is in grey, with dark grey front and rear panels
- Moulded in high impact ABS plastic UL-94-HB
- Includes 4 pcs screws and rubber feet



WARRANTY

### LIGHT GREY - DARK GREY END PANELS

W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
95	158	47	HB-5922	\$9.95	\$8.75	\$7.75

### HIGH IMPACT ABS INSTRUMENT CASE

This top quality case is ideally suited for instrumentation, telecommunication, or just to make your projects look fabulous

- Removeable ABS front and rear panels
- Top and bottom have a tongue and groove joint and are lightly textured which offers a non-scratch surface & keeps the high quality finish
- Guide slots provided for vertical mounting of PCBs
- Bosses are provided for horizontal mounting of PCBs
- Screws supplied to secure lid to base

### GREY ABS - UL94HB



WARRANTY

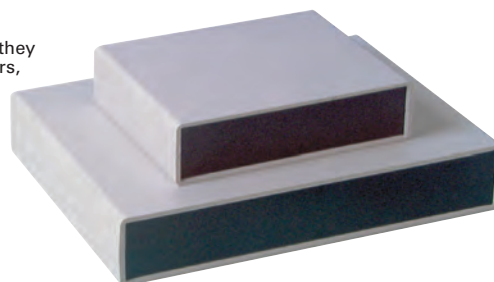
W(mm)	D(mm)	H(mm)	END PANELS	CAT.	Qty 1+	Qty 4+	Qty 10+
140	110	35	Black	HB-5970	\$6.25	\$5.60	\$5.00

### PRO QUALITY ABS INSTRUMENT CASES

Our superb instrument cases will give your projects the professional appearance they deserve. Internal mounting posts enable a wide combination of PCB's transformers, etc., to be accommodated PCB guide rails provided internally allow vertical PCB positioning to several locations

- Removable front and rear panels, attractive textured finish one side and plain the other (Enables direct engraving, silk screen printing etc., to plain side)
- Top and bottom split apart for ease of construction or service. Feet included
- Great for test instruments and other high grade projects

W(mm)	D(mm)	H(mm)		CAT.	Qty 1+	Qty 4+	Qty 10+
200	160	70	Non-vented	HB-5912	\$14.95	\$13.35	\$11.70
253	190	82	Vented	HB-5910	\$24.95	\$22.45	\$19.95



WARRANTY



## ✓ TOOL & INSTRUMENT CASES

### IPX8 WATERPROOF ABS CASES

Black waterproof ABS cases for storing or transporting just about anything including Smartphones, radios, wallets, delicate electronic devices and more. They are fully protected from water, dust, and sludge thanks to a gasket seal and powerful latches. The insides are lined with a layer of protective foam to insulate against bumps and knocks. Bring one on your next camping trip and keep those valuables protected.

- Lanyard included
- Waterproof & Shockproof



SIZE	L(mm)	W(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
Small	182	120	42	HB-6421	\$19.95	\$17.70	\$15.70
Medium	182	120	75	HB-6423	\$24.95	\$22.35	\$19.70
Large	210	120	90	HB-6425	\$34.95	\$31.45	\$27.90

## ✓ WATERPROOF ENCLOSURES

### IP66 INDUSTRIAL ABS ENCLOSURES

Gasket seals, stainless steel hardware and IP66 rated for use in industrial, marine and other harsh environments. The closures have a locking catch that engages to positively hold the lid closed until disengaged. Each enclosure includes a 1.8mm galvanised chassis for mounting DIN rail, switchgear, relays or circuit breakers. A size for any application.

- Dimensions:  
HB-6404: 200(L) x 200(D) x 130(H)mm  
HB-6412: 175(L) x 125(D) x 75(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
Opaque Lid	HB-6404	\$34.95	\$31.45	\$27.95
Transparent Lid	HB-6412	\$34.95	\$31.45	\$27.95

## ✓ ABS ENCLOSURES

### JIFFY BOXES

Manufactured from ABS plastic, these jiffy boxes not only look great, they have been designed to incorporate everything our customers wanted in a constructor's box. Sizes are compliant with industry standards externally and PCB fitting internally.

- Impervious, dimple-free finish provides good adhesion for screen printing
- Lids feature a 5mm grid of 'centre punch' type points on the underside for quick & accurate drilling
- Lids also feature a 10mm grid of scribed lines providing an easy and precise guide for cutting or filing cut-outs
- PCB guides in the sides of the box have snap-in locators. Eliminates the need for stand-off hardware when mounting boards horizontally
- Box also has a grid of 'centre punch' type points on the base of the inside
- Supplied with lid fixing screws and safety concealment plugs



SIZE	EXTERNAL DIMENSIONS (mm)	TO FIT PCB (mm)	
		Vertical	Horizontal
UB1	158 x 95 x 53	89 x 48	134 x 88
UB2	197 x 113 x 63	105 x 57	172 x 104
UB3	130 x 68 x 44	63 x 39	107 x 62
UB5	83 x 54 x 31	50 x 27	62 x 49

		CAT.	Qty 1+	Qty 4+	Qty 10+
UB1	Black	HB-6011	\$4.45	\$3.95	\$3.45
UB2	Black	HB-6012	\$6.95	\$6.25	\$5.50
UB3	Black	HB-6013	\$3.95	\$3.45	\$3.15
UB3	Grey	HB-6023	\$3.95	\$3.45	\$3.15
UB5	Black	HB-6015	\$2.95	\$2.60	\$2.30
UB5	Grey	HB-6025	\$2.95	\$2.60	\$2.30
UB5	Clear	HB-6005	\$2.95	\$2.60	\$2.30

### BLUE (TRANSLUCENT IMAC® LOOK)

		CAT.	Qty 1+	Qty 4+	Qty 10+
UB5	Blue	HB-6004	\$3.45	\$3.05	\$2.75

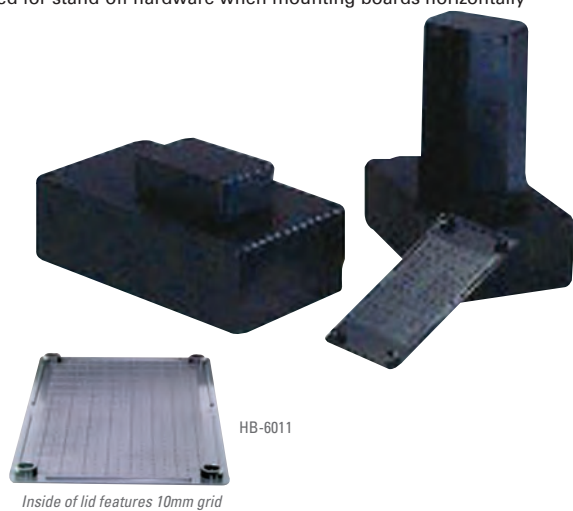
### FLANGED ABS LIDS VERSION OF JIFFY BOXES

These professional enclosures are identical to the UB3 & UB5 jiffy boxes, except they feature flanged lids for bulkhead/surface mounting. The exclusive moulded Jaycar drilling template on the inside of the lid is included, as are the screw hole plugs to hide the lid screws. Refer to the jiffy box information on the left for full detail on the drilling template. Ideal for automotive, security, audio/video plus a wide variety of other applications.

- Lid moulded, drill assist pilot holes on a 5 & 10mm pitch
- Four hole plugs to improve finish
- Moulded in ABS plastic
- Exclusive to Jaycar

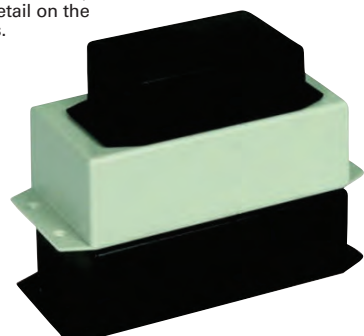
SIZE	EXTERNAL DIMENSIONS (mm)	TO FIT PCB (mm)	
		VERTICAL	HORIZONTAL
UB3	130 x 68 x 44	63 x 39	107 x 62
UB5	83 x 54 x 31	50 x 27	62 x 49

		CAT.	Qty 1+	Qty 4+	Qty 10+
UB3	Black	HB-6014	\$4.45	\$3.95	\$3.45
UB5	Black	HB-6016	\$2.95	\$2.60	\$2.30
UB3	Grey	HB-6024	\$4.45	\$3.95	\$3.45



HB-6011

Inside of lid features 10mm grid





## ABS ENCLOSURES (CONTINUED)

### ABS ENCLOSURES WITH SNAP-IN HINGED LID

Versatile ABS plastic enclosures with self-locking construction that provides easy opening and closing of the enclosure without use of additional tools. The rubber cable entry/exit also means you don't need to get the drill out in order to run cabling from the box.

- Four internal moulded standoffs allow you mount a PCB horizontally
- Available in light grey and black colours, and made from high strength ABS plastic
- Full specifications see website

**External dimensions (excluding flange):**

HB-6431 & HB-6433 - 91(L) x 79(W) x 45(H)mm

HB-6432 & HB-6434 - 91(L) x 122(W) x 69(H)mm

COLOUR	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Grey	1-Way Cable Entry	HB-6431	\$5.95	\$5.50	\$4.75
Black	1-Way Cable Entry	HB-6433	\$5.95	\$5.50	\$4.75
Grey	2-Way Cable Entry	HB-6432	\$7.95	\$6.95	\$6.25
Black	2-Way Cable Entry	HB-6434	\$7.95	\$6.95	\$6.25



### DIN RAIL ENCLOSURE 6U WITH CLEAR LID

This enclosure is made of light-grey ABS and has a clip to attach it to a standard DIN rail. We've found it's the perfect size for an Arduino Uno or even a Raspberry Pi, and will make a perfect way to protect and mount projects based around Arduino and Raspberry Pi. Includes a clear lid for a diagnostic display or even some indicator LEDs.

- 6U DIN rail mounting
- Measures 95mm x 106mm x 58mm including clip
- Side knockouts for terminal connections



COLOUR	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Grey	DIN 6U	HB-6273	\$19.95	\$17.95	\$15.95

### IP54 HIGH QUALITY POLYSTYRENE ENCLOSURES

This range includes a small flat case that is ideal for remote control transmitters, up to a case that is ideal for bench test equipment, and the best thing is that they are not expensive.

All are supplied with removeable front and rear panels which are light grey in colour, with the rest of the case dark grey. They are moulded in ABS, conform to IP54 and IEC529 and NEMA4 with respect to moisture and dust proof sealing and flame retardant to UL94-VO. Guide slots are provided for vertical mounting of PCBs, and spacers are moulded in for horizontal mounting.

All but the smallest two have M3 screws and brass inserts to hold top and bottom together.



### DARK GREY ABS - FLAME RETARDANT TO UL94

W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
90	50	16	HB-6030	\$4.95	\$4.45	\$3.90
90	50	24	HB-6031	\$5.95	\$5.25	\$4.75
120	60	30	HB-6032	\$7.95	\$6.95	\$6.25
150	80	30	HB-6034	\$12.95	\$11.35	\$10.35
190	100	40	HB-6036	\$18.95	\$16.95	\$14.95



### IP65 SEALED ABS ENCLOSURES

- Made with ABS Material
- Moulded in dark grey
- Operating temperature: -20°C to +80°C
- Bosses on internal base allow fixing of PCBs horizontally, or connection of terminals etc
- The lid and base incorporate a tongue and groove sealing system with a neoprene gasket
- Lid fixing screws are M-4 stainless steel (non-magnetic) into threaded brass inserts
- Wall mounting holes and lid fixing screws are outside the sealing area thus preventing the ingress of moisture and dust
- Some sizes also available with external flange to allow mounting after the box has been sealed
- Designed to IP65 of IEC529 and NEMA 4 (dust and hose proof)
- Internal guide slots for mounting PCB assemblies vertically (Not on HB-6120 or HB-6134)



W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
64	58	35	HB-6120	\$5.95	\$5.25	\$4.75
64	58	35 Flange	HB-6121	\$6.95	\$6.25	\$5.50
115	65	40	HB-6122	\$8.95	\$7.95	\$6.95
115	65	40 Flange	HB-6123	\$9.95	\$8.75	\$7.75
115	65	55	HB-6124	\$9.95	\$8.75	\$7.75
115	65	55 Flange	HB-6138	\$10.95	\$9.75	\$8.75
115	90	55	HB-6126	\$12.95	\$11.35	\$10.35
115	90	55 Flange	HB-6127	\$14.95	\$13.35	\$11.70
171	121	55 Flange	HB-6125	\$19.95	\$17.70	\$15.70
171	121	55	HB-6128	\$17.95	\$15.95	\$14.35
171	121	80	HB-6129	\$21.95	\$19.70	\$17.35
222	146	55	HB-6130	\$24.95	\$22.35	\$19.70
222	146	75	HB-6132	\$28.95	\$25.95	\$22.95
240	160	90	HB-6134	\$37.95	\$33.95	\$30.45

## ABS ENCLOSURES (CONTINUED)

### BULKHEAD ABS MOUNT CASES

4 cases in the range. The two smaller sizes have moulded in square cable entries on each end, and holes for screws bolts to mount the case.

- Colour is black
- The two larger cases have a moulded bracket at each end with a screw hole for easy mounting.

#### HB-6075

The base snaps into place, and there is a round 10mm dia hole in one side for cable entry.

#### HB-6080

The base mounts with 4 self tapping screws.

#### HB-6081

The base mounts to case with 4 self tapping screws included.

#### HB-6082

This case has mounting brackets at each end that are easily removable if you do not wish to mount the case. It has a clear plastic front/top plate that allows you to view the contents of the box. This plate is screwed on from the base/back and cannot easily be removed from the front.

- Colour: Black and Clear

#### BLACK - HIGH IMPACT ABS

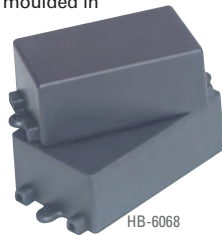
W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
65	38	27	HB-6065	\$2.65	\$2.30	\$2.07
72	44	28	HB-6068	\$2.95	\$2.60	\$2.30
88	69	33	HB-6075	\$3.75	\$3.30	\$2.95
112	67	36	HB-6080	\$5.75	\$4.95	\$4.60

### EXTRA DEEP BULKHEAD ABS MOUNT CASES

W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
72	50	63	HB-6081	\$6.95	\$6.25	\$5.50

### BULKHEAD MOUNT CASE WITH CLEAR FRONT / TOP

W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
120	70	30	HB-6082	\$11.95	\$10.45	\$9.45



HB-6068



### SNAP FIT ABS ENCLOSURES - BLACK

A range of black ABS enclosures with side flanges allowing wall, or even ceiling mount. Snap fit design locks together to enclose your circuit board or project inside.

- Material: ABS
- Colour: Black
- Wall mount holes: 2 x 4.5mm Dia
- Internal holes: 4 x 2.6mm x 6mm



HB-6006

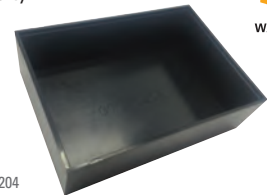


CAT.	DIMENSIONS (INTERNAL)	DIMENSIONS (EXTERNAL)
HB-6006	45.44(W) x 45.84(D) x 18.0(H)mm	70.4(W) x 50.5(D) x 27.0(H)mm
HB-6007	65.44(W) x 45.84(D) x 33.0(H)mm	90.4(W) x 50.5(D) x 42.0(H)mm
HB-6008	75.44(W) x 76.04(D) x 33.5(H)mm	100.6(W) x 80.7(D) x 43.5(H)mm
HB-6009	100.44(W) x 66.04(D) x 41.1(H)mm	127.0(W) x 70.7(D) x 50.5(H)mm

W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
70.4	50.5	27.0	HB-6006	\$3.95	\$3.55	\$3.15
90.4	50.5	42.0	HB-6007	\$4.95	\$4.45	\$4.00
100.6	80.7	43.5	HB-6008	\$5.95	\$5.25	\$4.75
127.0	70.7	50.5	HB-6009	\$6.25	\$5.60	\$5.00

### ENCLOSURE POTTING BOX

- Protect your electronic assemblies against shock, temperature, humidity and chemicals
- Moulded in high impact ABS plastic
- Black in colour
- Flammability rating: UL-94HB



HB-5204



W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
39	39	27	HB-5202	\$1.50	\$1.35	\$1.20
45	30	25	HB-5200	\$1.00	\$0.90	\$0.80
70	50	20	HB-5204	\$2.95	\$2.60	\$2.30

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!



## Tech Talk: Ingress Protection (IP) Rating System

The IP rating system provides a means of classifying a piece of electric or electronic equipment (or sometimes the equipment's enclosure) in terms of its protection against various forms of environmental influence. The protection is from human interference, dust, water, etc. The IP rating is NOT an electrical standard. The rating is a two digit number, and the larger the value of each digit, the greater the protection.

Example: IP67

6 = Dustproof (Totally protected against dust ingress)

7 = Waterproof (Protected against immersion between 15cm and 1m)

# IP67

VALUE	1ST DIGIT	2ND DIGIT
0	No protection	No protection
1	Protected against solid objects over 50mm, e.g. hands, large tools	Protected against vertically falling drops of water
2	Protected against solid objects over 12.5mm, e.g. fingers, large tools	Protected against direct sprays of water up to 15° from vertical
3	Protected against solid objects over 2.5mm, e.g. tools, wires...	Protected against direct sprays of water up to 60° from vertical
4	Protected against solid objects over 1mm, e.g. tools, small wires...	Protected against water splashed from any direction: limited ingress permitted.
5	Limited protection against dust ingress (no harmful deposit)	Protected against low pressure water jets from any direction: limited ingress permitted
6	Totally protected against dust ingress	Protected against strong water jets (e.g. ship decks): limited ingress permitted
7	-	Protected against temporary immersion up to 1m for over 30 mins
8	-	Protected against long periods of immersion under pressure. Generally to 3m
9K	-	Protected against high pressure associated with steam cleaning





## SPECIALTY PLASTIC ENCLOSURES

### SEALED POLYCARBONATE ENCLOSURES - IP65

- Made with Polycarbonate material - moulded in light grey
- Operating temperature: -40 to +125C
- The lid and base incorporate a tongue and groove sealing system with a neoprene gasket
- Lid fixing screws are M-4 stainless steel (non-magnetic) into threaded brass inserts
- Wall mounting holes and lid fixing screws are outside the sealing area thus preventing the ingress of moisture and dust
- Designed to IP65 of IEC 529 and NEMA 4 (dust and hose proof)
- Internal guide slots for mounting PCB assemblies vertically (not on HB-6230)

#### LIGHT GREY

W (mm)	D (mm)	H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
82	80	55	HB-6230	\$12.95	\$11.35	\$10.35
115	65	40	HB-6212	\$13.95	\$12.35	\$10.95
115	90	55	HB-6216	\$14.95	\$13.35	\$11.70
171	121	55	HB-6218	\$19.95	\$17.95	\$15.95
171	121	80	HB-6224	\$23.95	\$21.35	\$18.95
222	146	55	HB-6220	\$29.95	\$26.95	\$23.95

#### LIGHT GREY WITH CLEAR LID

W (mm)	D (mm)	H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
171	121	55	HB-6248	\$23.95	\$21.35	\$18.95

#### LIGHT GREY WITH MOUNTING FLANGE

W (mm)	D (mm)	H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
64	58	35	HB-6211	\$9.95	\$8.75	\$7.75
115	65	40	HB-6213	\$12.95	\$11.35	\$10.35
115	90	55	HB-6217	\$16.95	\$14.95	\$13.35
171	121	55	HB-6219	\$21.95	\$19.70	\$17.35
171	121	80	HB-6221	\$25.95	\$23.35	\$20.70

### REMOTE CONTROL CASE

This case is ideal for a TV/VCR remote control. The case includes a battery compartment with sliding cover. It will accept either 2 x AA batteries or a 9V. The terminals for the AA batteries are included. The transmitting end of the box is supplied with 2 plastic panels, one the colour of the box, the other a red perspex for use with Infrared LEDs.

- Includes Battery Contact Kit & Translucent Panel



### KEYFOB REMOTE CONTROL CASE

Includes the case and hardware, which consists of pushbutton knobs, battery terminals, LED cover and keyring.



W (mm)	D (mm)	H (mm)	CAT.	Qty 1+
32	50	10	HB-5605	\$1.95

### 3 PIN PLUG PACK CASE

Make your own plug in power supplies with our vented case. Complete with earth pin!

- Plug pins to the new insulated standard



W (mm)	D (mm)	H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
55	47	95	HB-5900	\$5.95	\$5.25	\$4.75

### BLACK - HIGH IMPACT ABS UL94V0

W (mm)	D (mm)	H (mm)	FLAME RETARD	CAT.	Qty 1+	Qty 10+	Qty 20+
135	70	24	No	HB-5610	\$9.95	\$8.75	\$7.75

## METAL INSTRUMENT CASES

### METAL ENCLOSURES

Aluminium cases finished in grey with black finish steel cover. Ventilated and supplied with rubber feet.

See page 312 for our range of Rack Mount Enclosures.



HB-5442



HB-5446



W (mm)	D (mm)	H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
102	150	61	HB-5442	\$14.95	\$13.45	\$11.95
160	184	70	HB-5446	\$19.95	\$17.70	\$15.70

### PROFESSIONAL BENCH ENCLOSURE

This cabinet has pre-punched ventilation holes, metal thread fastening screws, aluminium prepainted front and rear panels, up to the minute styling and facilities to mount internal hardware without recourse to drilling lids. Apart from this, the enclosure features cabinet heights that comply with standard IEC297 rack heights. Even though it is not a rack cabinet many components (especially transformers) are made to comply to these height dimensions.

- Grey in colour



W (mm)	D (mm)	H (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
304	279	88	HB-5556	\$59.95	\$53.95	\$47.95

## METAL ENCLOSURES - ALUMINIUM

### ALUMINIUM ENCLOSURE WITH CLEAR ENDS

This great looking enclosure is sturdy and sleek. The extruded aluminium construction is ideal for both strength and heat-sinking if necessary. Provided with clear end caps to allow hole-less mounting of displays and diagnostic LEDs.

- Measures 115mm x 51mm x 119mm
- Slots for easy PCB mounting
- Clear end caps
- Sealing gaskets



CAT.	Qty 1+	Qty 4+	Qty 10+
HB-6294	\$34.95	\$30.95	\$27.95



### BLUE ALUMINIUM ENCLOSURE WITH CLEAR ENDS

This great looking enclosure is sturdy and sleek. The extruded aluminium construction is ideal for both strength and heat-sinking if necessary. Provided with clear end caps to allow hole-less mounting of displays and diagnostic LEDs.

- Measures 177mm x 61mm x 89mm
- Slots for easy PCB mounting
- Clear end caps
- Sealing gaskets



CAT.	Qty 1+	Qty 4+	Qty 10+
HB-6296	\$44.95	\$39.95	\$34.95



## METAL ENCLOSURES - DIECAST

### ECONOMY DIECAST ALUMINIUM BOXES

- Excellent screening properties for EMI and RFI
- Ideal for projects subject to weather
- Made from 380 Die-cast aluminium alloy (BS1490 LM24)
- Close fitting flanged lids
- Ideal for instruments, meter cases, filter networks etc
- Robust, light weight and easy to machine
- Ideal for projects involving heat as the case itself makes an excellent heatsink



W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
51	51	32	HB-5060	\$7.95	\$6.95	\$6.25
111	60	30	HB-5062	\$9.95	\$8.75	\$7.75
111	60	54	HB-5063	\$12.95	\$11.35	\$10.35
119	94	34	HB-5067	\$14.95	\$13.35	\$11.70
119	94	57	HB-5064	\$18.95	\$16.95	\$14.95



### IP65 SEALED DIECAST ALUMINIUM BOXES

This range of boxes compare in quality to those English and Canadian ones that are VERY expensive. These are ideal for housing electronic assemblies, pneumatic, hydraulic & electrical devices for commercial & industrial environments. Provides effective shielding of EMI and RFI.

- Aluminium diecast - resistant to atmospheric and marine corrosion
- Designed to IP65 of IEC529 and NEMA4 (dust and hoseproof)
- Wall mounting holes and lid fixing screws are outside the sealing area
- The lid incorporates a recessed neoprene gasket
- Bosses on internal base for fixing PCBs horizontally or connection of earth grounding, etc
- Internal guide slots for mounting PCB assemblies vertically
- Screw holes for lid mounting are roll threaded
- Captive, recessed lid screws
- Heat rating up to 400°C



See our range of knobs on page 124.

**MANUFACTURERS AND BULK USERS - CONTACT JAYCAR FOR BULK PRICING.**

### IP65 SEALED DIECAST ALUMINIUM BOXES - FLANGED MOUNT

Sealed aluminium enclosures for external use are provided with flanges and holes for wall mounting. Lid fixing bolts are located outside the sealing area to ensure better sealing. Made from aluminium alloy ADC-10 (JIS) and provides protection against dust and moisture (IP65). Features racks and guides for mounting a PCB horizontally or vertically.



WARRANTY

W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
90	36	30	HB-5029	\$10.95	\$9.75	\$8.75
64	58	35	HB-5031	\$11.95	\$10.70	\$9.50
115	90	55	HB-5044	\$23.95	\$21.35	\$18.95
171	121	55	HB-5041	\$36.95	\$33.45	\$29.45

SPECIFICATIONS	ALL MODELS
Wall Thickness	3.4 +/-0.1mm
Box And Lid	Aluminium alloy ADC-10 to Japan Industrial Standard (JIS) in natural state
Gasket	Neoprene, resistant to oil and petrol
Lid Screws	M4 stainless steel (non magnetic)
Ground Screw And Washer, Copper Plated.	

W(mm)	D(mm)	H(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
64	58	35	HB-5030	\$9.95	\$8.75	\$7.75
115	65	30	HB-5036	\$14.95	\$13.35	\$11.70
115	65	55	HB-5040	\$18.95	\$16.95	\$14.95
115	90	55	HB-5042	\$21.95	\$19.70	\$17.35
171	121	55	HB-5046	\$34.95	\$31.45	\$27.90
222	146	55	HB-5050	\$36.95	\$33.45	\$29.45

### Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck\*.

\*Conditions apply - see page 526 For details



# Cable & Connectors



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**WINNER**



### Smart Hardware Competition:

- JOHN BELIK, SHOPS AT JAYCAR IPSWICH

"I needed to quickly test VGA cables so I thought up this useful VGA cable tester. You simply plug a VGA cable into the box and use the shorting link connector on the other end of the cable and the appropriate red LEDs light up if the leads are continuous."



### Smart Hardware Competition:

- DAMIAN CAMILLERI, SHOPS AT JAYCAR Fyshwick

"I turned my 'dumb' TV, HDMI Switchers, Wireless Audio, DVR, and blind controller into a network of Raspberry PI controlled interfaces. I then built a network protocol for their communication and built a front end home automation web app. I then integrated this with Apple's HomeKit through an open source 'hack' called HomeBridge so it could all be controlled from Siri. There was a lot of learning done over Christmas... I did this all over the school holidays which ended last Monday."



# Speaker Cable - by the Metre or Roll:

Everyone, at some stage of their life, needs to run a length of wiring to set up a speaker or two. Yes, you may be able to cobble some mains fig.8 flex to do the job - but really, let's get serious. The Jaycar range of speaker cable goes from quite modest to gi-normous! At the modest prices shown

below, why not just use the right stuff - with polarisation to boot - to get that job done, neatly & efficiently. Oh, and if you find yourself doing speaker wiring jobs a fair bit, you may be better off buying a spool. It's always there when you need it.

## LIGHT DUTY FIGURE 8 14/0.14MM OFC

Ideal for Hi-Fi systems, intercoms, etc. Grey with black trace.

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1702
Conductor Diameter	0.51mm x 2
Conductor mm2	0.215mm <sup>2</sup> x 2
AWG	24 x 2
Stranding	(14 x 0.14mm OFC) x 2
Dimensions	1.8mm x 3.6mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1702	\$0.50	\$40.00	\$32.00

## EXTRA HEAVY DUTY FIGURE 8 41/0.20MM OFC

Clear with white trace.

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1710
Conductor Diameter	1.29mm x 2
Conductor mm2	1.288mm <sup>2</sup> x 2
AWG	16 x 2
Stranding	(41 x 0.2mm OFC) x 2
Dimensions	3.2mm x 6.4mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1710	\$1.75	\$150.00	\$105.00

## PRO AUDIO SPEAKER CABLE 41/0.16MM OFC

Super flexible speaker cable. Separate colour-coded 18AWG red and black conductors in a single outer sheath. Conductors: 41 x 0.16 OFC.

Jacket OD: 6mm

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1754
Conductor Diameter	0.16mm x 2
Conductor mm2	0.824mm <sup>2</sup> x 2
AWG	18 x 2
Stranding	(41 x 0.16mm OFC) x 2
Dimensions	6mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1754	\$1.95	\$165.00	\$125.00

## REGULAR DUTY FIGURE 8 14/0.20MM

Clear with white trace.

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1704
Conductor Diameter	0.74mm x 2
Conductor mm2	0.44mm <sup>2</sup>
AWG	21 x 2
Stranding	(14 x 0.2mm OFC) x 2
Dimensions	2mm x 4mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1704	\$0.70	\$55.00	\$45.00

## EXTRA HEAVY DUTY FIGURE 8 79/0.20MM OFC

Exactly half the wire content of the Jumbo cable but still 3 times thicker than the heavy duty cable. Clear with white trace.

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1712
Conductor Diameter	1.8mm x 2
Conductor mm2	2.5mm <sup>2</sup> x 2
AWG	13 x 2
Stranding	(79 x 0.2mm OFC) x 2
Dimensions	4.0mm x 8.0mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1712	\$2.70	\$209.00	\$175.00

## CORE PRO AUDIO SPEAKER CABLE 41/0.16MM OFC

Super flexible for stage & pro applications. Four core OFC colour coded conductors.

Conductors: 41 x 0.16mm OFC.

Jacket OD: 7.5mm

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1762
Conductor Diameter	0.16mm x 2
Conductor mm2	0.824mm <sup>2</sup> x 2
AWG	18 x 4
Stranding	(41 x 0.16mm OFC) x 4
Dimensions	7.5mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1762	\$3.90	\$329.00	\$255.00

## MEDIUM DUTY FIGURE 8 19/0.18MM OFC

Suited to amplifiers up to 150 watts. 19 x 0.18mm. Black with white trace.

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1706
Conductor Diameter	0.8mm x 2
Conductor mm2	0.483mm <sup>2</sup> x 2
AWG	20 x 2
Stranding	(19 x 0.18mm OFC) x 2
Dimensions	2.6mm x 5.2mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1706	\$0.80	\$67.00	\$60.00

## JUMBO SPEAKER CABLE 259/0.12MM OFC

Top quality speaker cable. Figure 8, 259/0.12mm strands each side. Clear - blue trace.

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1732
Conductor Diameter	1.92mm x 2
Conductor mm2	2.93mm <sup>2</sup> x 2
AWG	12/13 x 2
Stranding	(259 x 0.12mm OFC) x 2
Dimensions	4mm x 8mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1732	\$4.10	\$340.00	\$295.00

## HEAVY DUTY FIGURE 8 24/0.20MM OFC

Suited for speaker systems above 150 watts. 24/0.2mm. Clear with black trace.

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1708
Conductor Diameter	0.97mm x 2
Conductor mm2	0.75mm <sup>2</sup> x 2
AWG	18/19 x 2
Stranding	(24 x 0.2mm OFC) x 2
Dimensions	2.8mm x 5.6mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1708	\$1.20	\$89.00	\$79.00

## FLAT JUMBO SPEAKER CABLE 203/0.12MM OFC

Ideal for car stereo or home wiring under the carpet. Clear with white trace

- 100m roll, PVC insulation



SPECIFICATIONS	WB-1740
Conductor Diameter	1.7mm x 2
Conductor mm2	2.3mm <sup>2</sup> x 2
AWG	13/14 x 2
Stranding	(203 x 0.12mm OFC) x 2
Dimensions	12.5mm x 8.5mm

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1740	\$3.50	\$285.00	\$235.00

## ✓ SPEAKER CABLE - 30M ROLLS

### LIGHT DUTY FIGURE 8 30M ROLL

14/0.14mm Figure 8. Grey with black trace.

AWG: 24 x 2.

WB-1703



### HEAVY DUTY FIGURE 8 30M ROLL

24/0.20mm Figure 8 clear with black trace.

AWG: 18 x 2.

WB-1709



### EXTRA HEAVY DUTY FIGURE 8 30M ROLL

79/0.2mm. figure 8. Clear with white trace.

AWG: 13 x 2.

WB-1713

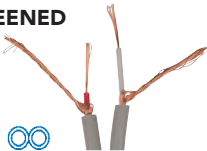


CAT.	1+ Roll	4+ Rolls	10+ Rolls
WB-1703	\$12.95	\$11.35	\$10.35
WB-1709	\$32.95	\$29.45	\$26.50
WB-1713	\$74.95	\$67.50	\$59.00

## ✓ SCREENED AUDIO & VIDEO CABLE

### FIGURE 8 TWIN SCREENED

Twin grey PVC covered individually screened conductors. Screens electrically separated.



SPECIFICATIONS	WB-1502
Conductor Diameter	0.32mm x 2
Conductor mm2	0.08mm <sup>2</sup> x 2
AWG	28 x 2
Max. Temp	70°C
Stranding	28 x 0.12mm
Resistance (20°C)	0.2245 Ω/m
Dimensions	4mm x 8mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1502	\$1.00	\$85.00	\$65.00

### SINGLE SCREENED AUDIO

Grey PVC covered, light duty cable. Ideal for patch cords, small microphones, amplifier wiring, etc.



SPECIFICATIONS	WB-1500
Conductor Diameter	0.32mm x 2
Conductor mm2	0.08mm <sup>2</sup> x 2
AWG	28 x 2
Max. Temp	70°C
Stranding	28 x 0.12mm
Resistance (20°C)	0.2245 Ω/m
Dimensions	3mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1500	\$0.55	\$45.00	\$35.00

### 2 CORE ROUND

Twin screened pair (not balanced). Enclosed in a thick wall PVC jacket. 0.127/7 + 0.12/40



SPECIFICATIONS	WB-1504
Conductor Diameter	0.32mm x 2
Conductor mm2	0.08mm <sup>2</sup> x 2
AWG	28 x 2
Max. Temp	70°C
Stranding	40 x 0.12mm
Resistance (20°C)	0.002245 Ω/m
Dimensions	3.5mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1504	\$0.90	\$67.00	\$55.00

### 4 CORE ROUND

4 conductors each screened and encased in one PVC covering. Ideal for DIN plug and socket wiring. Screens electrically common to all conductors.



SPECIFICATIONS	WB-1510
Conductor Diameter	0.32mm x 4
Conductor mm2	0.08mm <sup>2</sup> x 4
AWG	28 x 4
Max. Temp	70°C
Stranding	28 x 0.12mm
Resistance (20°C)	0.2245 Ω/m
Dimensions	4.5mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1510	\$1.30	\$105.00	\$80.00

## Professional Audio & Video

Triple cable, 2 for audio and the thicker one for video. It is the same cable that's used in our 3 RCA to 3 RCA pre-made cables. 2 Audio Cables.

• Roll Length 50m



"Fantastic quality for home theatre cabling."

- ADAM

RYDALMERE STORE MANAGER

SPECIFICATIONS	TWIN AUDIO CABLES	VIDEO CABLE
Inner Conductor	20 x 0.12mm OFC	24 x 0.12mm OFC
Insulator	1.6mm FPE Red/White	2.5mm FPE White
Screen	40 x 0.12mm OFC	4 x 16 x 0.12mm OFC
AWG		24

ROLL LENGTH	CAT.	Per Metre	1+ Roll	5+ Rolls
50m	WB-1554	\$3.50	\$130.00	\$105.00



### PROFESSIONAL S-VIDEO

High Quality cable for video. S-Video uses 4 pin mini DIN plugs. This is the same cable as used in our S-Video video cables. Ideal for home cinema.

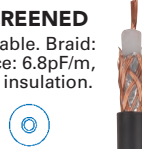


SPECIFICATIONS	WB-1556
Conductor Diameter	0.64mm x 2
Conductor mm2	0.32mm <sup>2</sup> x 2
AWG	22
Max. Temp	70°C
Stranding	25 x 0.12mm
Resistance (20°C)	0.055 Ω/m
Dimensions	6 x 2 x 6mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1556	\$1.75	\$140.00	\$120.00

### SINGLE CORE OFC SCREENED

High quality mono audio cable. Braid: 96/0.10 + Alum. Capacitance: 6.8pF/m, Impedance: 65Ω @ 1m. PEF insulation.



SPECIFICATIONS	WB-1508
Conductor Diameter	0.32mm x 2
Conductor mm2	0.08mm <sup>2</sup> x 2
AWG	22
Max. Temp	60°C
Stranding	45 x 0.12mm
Resistance (20°C)	0.0365 Ω/m
Dimensions	6mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1508	\$2.70	\$229.00	\$175.00

### FIGURE 8 OFC SCREENED AUDIO

High quality audio cable. As used on our best leads.



SPECIFICATIONS	WB-1506
Conductor Diameter	0.32mm x 2
Conductor mm2	0.08mm <sup>2</sup> x 2
AWG	28
Max. Temp	70°C
Stranding	7 x 0.12mm
Resistance (20°C)	0.23 Ω/m
Dimensions	6.5mm
Roll Length	40m

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1506	\$4.50	\$155.00	\$119.00

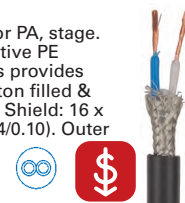
## ✓ PROFESSIONAL MICROPHONE CABLE

The best quality microphone cable for all P.A. and stage use. Flexible black matte finish PVC low noise cable with tinned copper screening.

### 2 CORE SCREENED

High quality mic cable for PA, stage. 60/0.08 x 2 core. Conductive PE insulation on conductors provides improved shielding. Cotton filled & tissue wrapped. Braided Shield: 16 x 9/0.10 tinned copper (144/0.10). Outer Jacket 6.0mm diameter.

• Roll Length 100m  
• AWG - 18



CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1530	\$2.75	\$219.00	\$179.00

### 4 CORE SCREENED

Conductors: 26/0.10 x 4. Conductive PE insulation on conductors provides improved shielding. Cotton filled & tissue wrapped. Braided shield: 16 x 8/0.10 tinned copper (128/0.10). Outer Jacket: 6.0mm diameter.

• Roll Length 100m Sold by the metre or by the roll.  
• AWG - 22



## RESPONSE

CAT.	Per Metre	1+ Roll	5+ Rolls
WB-1540	\$2.95	\$239.00	\$195.00

See CCTV cable WB-2017 on page 183

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required – see website, T&C or Store Manager for details.



# RCA Plugs & Sockets:

RCA derives from the name Radio Corporation of America. It is sometimes called a Phono connector or Cinch connector. The connector is commonly used for audio and video signals (composite or component).

## PLUGS - PLASTIC

Economy style.



PP-0240

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Blue	PP-0238	\$0.68	\$0.60	\$0.52
Green	PP-0239	\$0.68	\$0.60	\$0.52
Red	PP-0240	\$0.68	\$0.60	\$0.52
Black	PP-0242	\$0.68	\$0.60	\$0.52
Yellow	PP-0243	\$0.68	\$0.60	\$0.52
White	PP-0244	\$0.68	\$0.60	\$0.52

## NICKEL PLATED METAL RCA PLUGS WITH CABLE RELIEF SPRING



CAT.	Qty 1+	Qty 10+	Qty 50+
PP-0245	\$1.95	\$1.75	\$1.55

## GOLD PLATED METAL RCA PLUGS WITH CABLE RELIEF SPRING

• Up to 7mm cable



PP-0236

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	PP-0236	\$3.25	\$2.90	\$2.60
Black	PP-0237	\$3.25	\$2.90	\$2.60

## PREMIUM GOLD PLATED METAL BODY RCA PLUGS



PP-0230

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	PP-0230	\$3.95	\$3.45	\$3.15
Black	PP-0232	\$3.95	\$3.45	\$3.15
Yellow	PP-0231	\$3.95	\$3.45	\$3.15
White	PP-0233	\$3.95	\$3.45	\$3.15
Blue	PP-0234	\$3.95	\$3.45	\$3.15
Green	PP-0235	\$3.95	\$3.45	\$3.15

## SOCKETS - PLASTIC

Economy style.



PS-0250

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	PS-0250	\$0.60	\$0.52	\$0.47
Black	PS-0252	\$0.60	\$0.52	\$0.47

## METAL BODY RCA SOCKETS

With cable protection spring.



CAT.	Qty 1+	Qty 10+	Qty 50+
PS-0254	\$1.95	\$1.75	\$1.55

## GOLD PLATED METAL RCA SOCKET WITH CABLE RELIEF SPRING

With cable protection spring.



PS-0272

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	PS-0272	\$2.45	\$2.15	\$1.95
Black	PS-0274	\$2.45	\$2.15	\$1.95

## RCA PLUG & SOCKET WITH SPRING TERMINALS

RCA connector to spring terminal block. No specialist tools required.



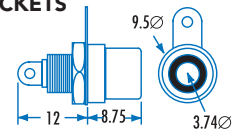
PA-3717

PA-3718

TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Plug	PA-3717	\$4.95	\$4.45	\$4.00
Socket	PA-3718	\$4.95	\$4.45	\$4.00

## RCA CHASSIS SOCKETS NICKEL PLATED

Non Insulated.  
Nickel plated.

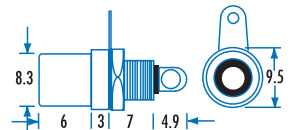


PS-0257

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Black	PS-0256	\$0.95	\$0.85	\$0.75
Red	PS-0257	\$0.95	\$0.85	\$0.75
Yellow	PS-0255	\$0.95	\$0.85	\$0.75

## RCA CHASSIS SOCKETS - GOLD

Non Insulated.

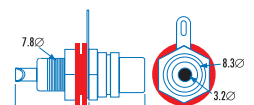


PS-0259

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Black	PS-0258	\$1.95	\$1.75	\$1.55
Red	PS-0259	\$1.95	\$1.75	\$1.55
Yellow	PS-0260	\$1.95	\$1.75	\$1.55
White	PS-0261	\$1.95	\$1.75	\$1.55
Blue	PS-0270	\$1.95	\$1.75	\$1.55
Green	PS-0271	\$1.95	\$1.75	\$1.55

## RCA CHASSIS SOCKETS - GOLD

Requires 9.5mm dia panel hole.

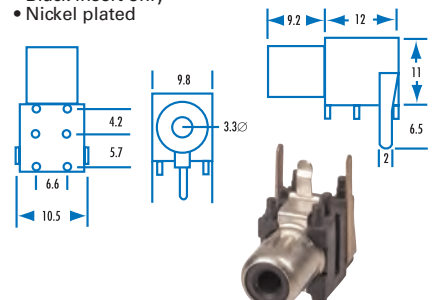


PS-0276

COLOUR	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	PS-0276	\$3.95	\$3.45	\$3.15
Black	PS-0277	\$3.95	\$3.45	\$3.15
Yellow	PS-0275	\$3.95	\$3.45	\$3.15
White	PS-0278	\$3.95	\$3.45	\$3.15

## RCA RIGHT ANGLE SOCKET

• Black insert only  
• Nickel plated



CAT.	Qty 1+	Qty 10+	Qty 50+
PS-0279	\$1.45	\$1.30	\$1.15

## Attention Educators! Can we Help?

If you're a parent or teacher and would like some practical resources or help, then your local Jaycar Store or Stockist can assist you with a wide range of learning projects for all ages.

In addition to the products above, we also have a large range of interconnection leads with RCA plugs or sockets on one end and RCAs - or many other types on the other.



## ✓ RCA ADAPTORS

### RCA SOCKET ADAPTORS



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
RCA Female to RCA Female	PA-3598	\$2.95	\$2.60	\$2.30
RCA Plug to 2 x RCA Socket	PA-3560	\$3.95	\$3.45	\$3.15
1 x RCA Socket to 2 x RCA Socket	PA-3562	\$3.95	\$3.45	\$3.15
RCA Socket to RCA Socket	PA-3599	\$5.95	\$5.25	\$4.75
3 x RCA to 3 x RCA Socket	PA-3564	\$7.95	\$6.95	\$6.25
RCA Socket to BNC Socket	PA-3678	\$3.95	\$3.45	\$3.15
Double Adaptor - Gold Plated	PA-3570	\$5.95	\$5.25	\$4.75

For a huge range of screened audio cable to suit the products see page 170

### PANEL MOUNT - RCA SOCKET TO SOCKET

Gold plated, insulated panel mounted RCA socket to RCA socket adaptors. Allows you to plug straight into the back of the socket.



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Yellow	PS-0441	\$3.95	\$3.45	\$3.15
Red	PS-0442	\$3.95	\$3.45	\$3.15
Black	PS-0443	\$3.60	\$3.15	\$2.85
Blue	PS-0445	\$3.60	\$3.15	\$2.85
White	PS-0446	\$3.95	\$3.45	\$3.15

### Automatic Account:

**For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.**

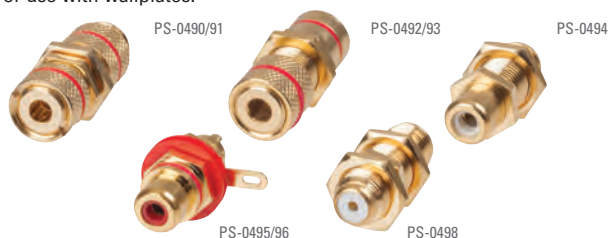
### RCA PLUG TO ADAPTORS



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
RCA Plug to 3.5mm Mono Socket	PA-3508	\$1.95	\$1.75	\$1.55
RCA Male to RCA Male Socket	PA-3597	\$2.95	\$2.60	\$2.30
RCA Plug to 6.5mm Mono Socket	PA-3510	\$1.95	\$1.75	\$1.55
RCA Plug to PAL TV Socket	PA-3676	\$3.95	\$3.45	\$3.15
RCA Male to T-81 Socket	PA-3677	\$3.45	\$3.05	\$2.75
RCA Plug to BNC Female Socket	PA-3655	\$3.95	\$3.45	\$3.15
RCA Adaptor	PA-3566	\$4.95	\$4.45	\$3.90

## ✓ GOLD PLATED CONNECTORS

For use with wallplates.

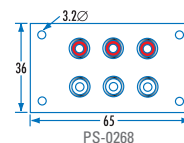
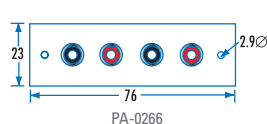
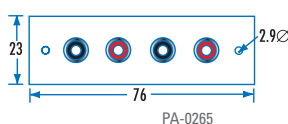
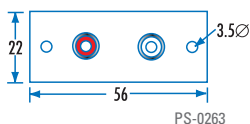
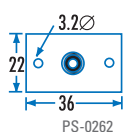


TYPE	CAT.	Qty 1+	Qty 2+	Qty 5+
Binding Post with Banana - Red	PS-0490	\$3.95	\$3.45	\$3.15
Binding Post with Banana - Black	PS-0491	\$3.95	\$3.45	\$3.15
Banana Socket Binding Post - Red	PS-0492	\$2.95	\$2.60	\$2.30
Banana Socket Binding Post - Black	PS-0493	\$2.95	\$2.60	\$2.30
RCA Socket to F-61 Socket	PS-0494	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Blue	PS-0489	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Red	PS-0495	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Black	PS-0496	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Yellow	PS-0497	\$2.45	\$2.15	\$1.95
RCA Socket - Solder - Green	PS-0499	\$2.45	\$2.15	\$1.95
F-61 Socket to F-61 Socket	PS-0498	\$2.45	\$2.15	\$1.95

## ✓ RCA PHENOLIC SOCKETS

### RCA PHENOLIC SOCKETS

RCA sockets securely riveted to an insulated panel. Each socket is electrically isolated from the other.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
1 Way	PS-0262	\$1.10	\$0.95	\$0.85
2 Way	PS-0263	\$1.65	\$1.45	\$1.30
4 Way	PA-0265	\$2.95	\$2.65	\$2.35
4 Way Gold Plated	PA-0266	\$3.95	\$3.55	\$3.15
6 Way	PS-0268	\$3.95	\$3.45	\$3.15



## 2.5MM JACK PLUGS, SOCKETS & ADAPTORS

Also known as a phone plug (US) or TRS (tip, ring, sleeve). Available as mono or stereo versions in several common diameters: 2.5mm - the smallest size used where space is a premium. Was once used as a mono earphone plug but now has multichannel functions.

### 2.5MM SUBMINIATURE PLUGS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono	PP-0100	\$0.75	\$0.65	\$0.60
Stereo	PP-0103	\$1.25	\$1.10	\$0.97
Stereo Right Angled	PP-0104	\$3.95	\$3.45	\$3.15
4 Contact	PP-0101	\$2.95	\$2.60	\$2.30

### 2.5MM STEREO LINE PLUG - IP67

- Nickel plated

LTW<sup>®</sup>

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Stereo Line Plug with 1m Cable	PP-0787	\$12.95	\$11.35	\$10.35

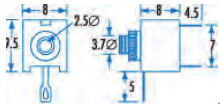
### 2.5MM LINE SOCKET

- Nickel plated

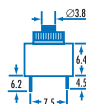


TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Stereo	PS-0109	\$1.95	\$1.75	\$1.55

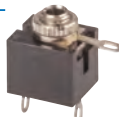
### 2.5MM CHASSIS SOCKETS



PS-0105



PS-0107



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono	PS-0105	\$0.95	\$0.85	\$0.75
Stereo	PS-0107	\$1.95	\$1.75	\$1.55

### 2.5MM SURFACE MOUNT SOCKETS

- Packet of 10



SMD

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
SMD Stereo Switched	PS-0110	\$19.95	\$17.55	\$11.95

### 2.5MM ADAPTORS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
2.5mm Stereo Plug to 3.5mm Stereo Right Angle Socket	PA-3502	\$3.95	\$3.45	\$3.15
2.5mm Mono Plug to 6.5mm Mono Socket	PA-3504	\$1.95	\$1.75	\$1.55
2.5mm Stereo Plug to 3.5mm Stereo Socket	PA-3532	\$3.95	\$3.45	\$3.15

## 3.5MM JACK PLUGS, SOCKETS & ADAPTORS

Also known as a phone plug (US) or TRS (tip, ring, sleeve). Available as mono or stereo versions in several common diameters: 3.5mm - the mini plug, which in the stereo version is widely found on headphones used with portable audio such as MP3 players etc. It is also a standard connector used on PC sound cards. The mono version is occasionally used as a DC power connector.

### 3.5MM MINIATURE PLUGS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono	PP-0114	\$0.85	\$0.75	\$0.65
Stereo	PP-0130	\$1.25	\$1.10	\$0.97
Stereo Right Angled	PP-0136	\$1.85	\$1.65	\$1.45
4 Contact	PP-0138	\$4.95	\$4.45	\$3.90

### 3.5MM METAL PLUGS WITH CABLE PROTECTION SPRING

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono	PP-0116	\$1.45	\$1.30	\$1.15
Stereo	PP-0135	\$1.85	\$1.65	\$1.45
Stereo Gold Plated	PP-0131	\$2.45	\$2.15	\$1.95

### 3.5MM SLIMLINE - GOLD PLUGS

- Gold plated over brass



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Stereo	PP-0132	\$3.95	\$3.45	\$3.15
4 Pole	PP-0134	\$4.95	\$4.45	\$3.90

### 3.5MM LINE SOCKETS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono	PS-0126	\$1.45	\$1.30	\$1.15
Stereo	PS-0134	\$1.95	\$1.75	\$1.55
4 Contact	PS-0139	\$4.95	\$4.45	\$3.90

Addicted to Social?  
We're Here to Chat!



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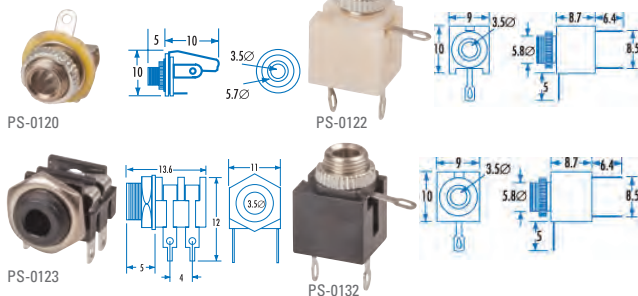


youtube.com/user/JaycarVideo



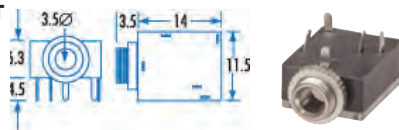
## ✓ 3.5MM JACK PLUGS, SOCKETS & ADAPTORS (CONTINUED)

### 3.5MM CHASSIS SOCKETS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono Open	PS-0120	\$1.45	\$1.30	\$1.15
Mono Enclosed	PS-0122	\$0.95	\$0.85	\$0.75
Mono Insulated	PS-0123	\$2.45	\$2.15	\$1.95
Stereo	PS-0132	\$1.35	\$1.20	\$1.05

### 3.5MM PCB SOCKET



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
PCB Stereo Switched	PS-0133	\$1.65	\$1.45	\$1.30

### 3.5MM ADAPTORS - STEREO

- Nickel plated



STEREO 3.5MM	CAT.	Qty 1+	Qty 4+	Qty 10+
Plug to 6.5mm Stereo Socket	PA-3586	\$2.95	\$2.60	\$2.30
Plug to 3.5mm Stereo R/A Socket	PA-3503	\$3.95	\$3.45	\$3.15
Plug to 2.5mm Stereo Socket	PA-3536	\$3.95	\$3.45	\$3.15
Plug to 2 x 3.5mm Stereo Sockets	PA-3582	\$3.95	\$3.45	\$3.15
Plug to 2 x RCA Sockets	PA-3580	\$3.95	\$3.45	\$3.15
Socket to 2 x 3.5mm Mono Plug	PA-3581	\$4.95	\$4.45	\$4.00

### 3.5MM STEREO SOCKET TO 3.5MM STEREO SOCKET

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Stereo Socket	PA-3583	\$1.95	\$1.75	\$1.55

### 3.5MM STEREO SOCKET TO 2 X RCA SOCKETS ADAPTOR



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Stereo Socket	PA-3585	\$2.55	\$2.25	\$1.95

### 3.5MM ADAPTORS - MONO

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Plug to RCA Socket	PA-3500	\$1.95	\$1.75	\$1.55
Plug to 6.5mm Mono Socket	PA-3506	\$1.95	\$1.75	\$1.55
Plug 3.5mm Stereo Socket	PA-3584	\$1.95	\$1.75	\$1.55
Plug 6.5mm Stereo Socket	PA-3594	\$1.95	\$1.75	\$1.55
Plug PAL (75 ohm) Socket	PA-3657	\$3.95	\$3.45	\$3.15

## ✓ 6.5MM JACK PLUGS, SOCKETS & ADAPTORS

Also known as a phone plug (US) or TRS (tip, ring, sleeve). Available as mono or stereo versions in several common diameters: 6.5mm - the largest size; the mono version is used on guitar & microphone leads, while the stereo version is often used on Hi-Fi headphones. The 6.5mm (or 1/4" phone plug) was originally used for manual telephone switchboards particularly the 'Sylvester' type.

### 6.5MM 1/4" PLUGS

#### PLUGS - LINE - MONO

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono - Plastic	PP-0150	\$1.00	\$0.90	\$0.80
Mono - Metal	PP-0154	\$1.85	\$1.65	\$1.45
Mono - Gold	PP-0156	\$3.95	\$3.45	\$3.15
Mono - Red	PP-0151	\$4.95	\$4.45	\$3.90
Mono - Black	PP-0152	\$4.95	\$4.45	\$3.90

### 6.5MM 1/4" PLUGS

#### PLUGS - LINE - STEREO

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Stereo - Plastic	PP-0170	\$1.70	\$1.50	\$1.35
Stereo - Metal	PP-0174	\$2.45	\$2.15	\$1.95
Stereo - Gold	PP-0175	\$5.25	\$4.60	\$4.15
Stereo - Red	PP-0177	\$4.95	\$4.45	\$3.90
Stereo - Black	PP-0178	\$4.95	\$4.45	\$3.90

### 6.5MM PRO METAL PLUGS

Made especially for the rigours of the road or anywhere where a heavy duty, tough 6.5mm plug is called upon. The mono plugs feature blue identification rings, whereas the stereo plugs have black rings. This is particularly handy if you have a combination of stereo and mono plugs on the one mixing desk or patch bay.

- Nickel plated over brass



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono Metal - Pro	PP-0157	\$5.45	\$4.90	\$4.30
Stereo Metal - Pro	PP-0179	\$6.45	\$5.75	\$4.95

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.



## 6.5MM JACK SOCKETS & ADAPTORS

### 6.5MM 1/4" LINE SOCKETS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono	PS-0166	\$1.65	\$1.45	\$1.30
Stereo	PS-0194	\$1.95	\$1.75	\$1.55

### 6.5MM 1/4" FLUSH PANEL SOCKET

Ever tried to mount a 6.5mm socket in a wooden box? It was impossible! Now it's easy with our unique plastic mounting aid.

TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
Socket Mounting Cup	HS-8025	\$2.50	\$2.20	\$1.95

### 6.5MM ADAPTORS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Mono Socket to 6.5mm Mono Plug	PA-3588	\$1.95	\$1.75	\$1.55
Mono Plug to RCA Socket	PA-3592	\$1.95	\$1.75	\$1.55
Mono Plug to 2 x 6.5mm Mono Socket	PA-3534	\$3.95	\$3.45	\$3.15
Stereo Plug 3.5mm Stereo Socket	PA-3590	\$1.95	\$1.75	\$1.55
Stereo Plug to 2 x 6.5mm Stereo Socket	PA-3530	\$3.95	\$3.45	\$3.15
Stereo Socket to 6.5mm Stereo Socket	PA-3591	\$3.95	\$3.45	\$3.15

### 6.5MM RIGHT ANGLE PLUGS

Super tough metal construction plug for harsh environments & musos who want the best.

- Use with 6mm O.D. cable
- Strain relief provided
- Nickel plated



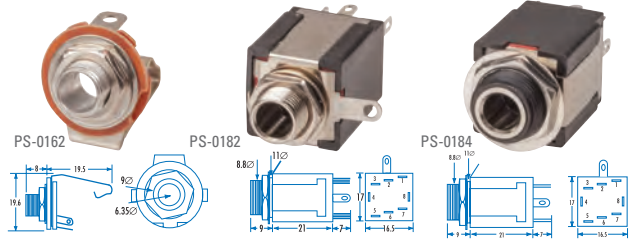
TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Pro Right Angle	PP-0159	\$4.95	\$4.45	\$3.90
Right Angle	PP-0158	\$1.95	\$1.75	\$1.55
Stereo Right Angle	PP-0176	\$2.50	\$2.21	\$1.95

## Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

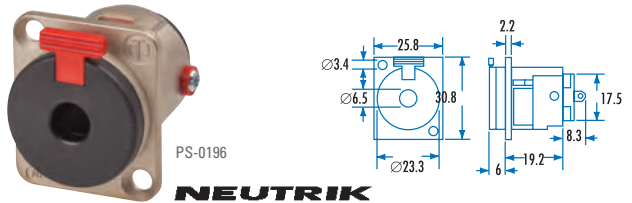
**Catalogue Department - Jaycar Electronics:**  
[catalogue@jaycar.com](mailto:catalogue@jaycar.com)

### 6.5MM 1/4" CHASSIS SOCKETS



### PROFESSIONAL LOCKING CHASSIS JACK

Metal shell, mates with all mono and stereo 6.5mm (1/4") phono plugs. Plug locking feature keeps plug in the socket.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Mono Open Unswitched	PS-0162	\$1.95	\$1.75	\$1.55
Mono & Stereo	PS-0196	\$19.95	\$17.95	\$15.95
Stereo Switched DPDT	PS-0182	\$2.95	\$2.60	\$2.30
Stereo Insulated Switched	PS-0184	\$3.45	\$3.05	\$2.75

### 6.5MM PCB / CHASSIS SOCKETS

#### MONO INSULATED

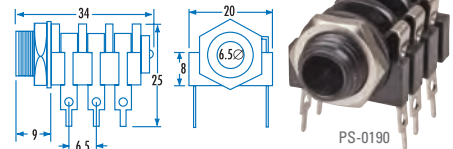
- ABS Body



#### INSULATED DPST SWITCHED - STEREO

Works OK in mono.

- ABS Body



#### INSULATED UNSWITCHED - STEREO

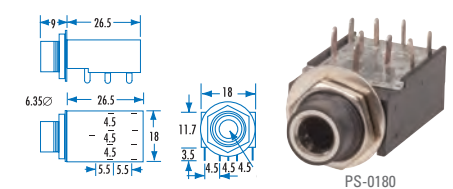
Works OK in mono.

- ABS Body



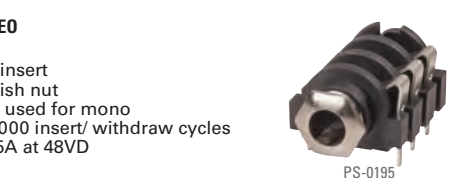
#### STEREO

- Sub-panel fixing
- ABS Body



#### HIGH QUALITY - STEREO

- Switching DPST
- Black plastic front insert
- Glossy chrome-finish nut
- Stereo, but can be used for mono
- Minimum Life: 10,000 insert/withdraw cycles
- Contact Rating: 2.5A at 48VD
- ABS Body



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Switched	PS-0160	\$2.45	\$2.15	\$1.95
Stereo Insulated DPST Switched	PS-0190	\$2.95	\$2.60	\$2.30
Stereo Insulated Unswitched	PS-0192	\$2.75	\$2.45	\$2.15
Stereo	PS-0180	\$2.95	\$2.60	\$2.30
Stereo	PS-0195	\$5.95	\$5.25	\$4.75

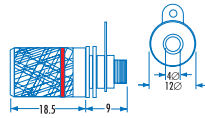




## BANANA BINDING POSTS

### BANANA SOCKETS / BINDING POSTS - METAL

Will accept a banana plug in the end and monster type cable or banana plug in the side. Designed for mounting on the back of amplifiers as mounting thread is only 6mm long.



AMPLIFIER MOUNT	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	PT-0430	\$4.95	\$4.45	\$3.90
Black	PT-0431	\$4.95	\$4.45	\$3.90

### DUAL

- Insulated cable entry
- Post spacing 19mm



PT-0457

### 50 AMP JUMBO

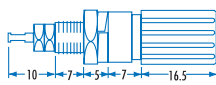
- 12mm hole size
- Overall dimensions: 58(D) x 20(Dia.)mm



PT-0465

### BINDING POSTS STANDARD

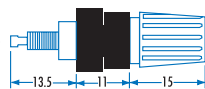
Incorporates a banana socket.



PT-0450

### PREMIUM

Super quality with metal thread.



PT-0460

COLOUR	TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Blue	Standard	PT-0450	\$1.65	\$1.45	\$1.30
Yellow	Standard	PT-0451	\$1.65	\$1.45	\$1.30
White	Standard	PT-0452	\$1.65	\$1.45	\$1.30
Red	Standard	PT-0453	\$1.65	\$1.45	\$1.30
Black	Standard	PT-0454	\$1.65	\$1.45	\$1.30
Green	Standard	PT-0455	\$1.65	\$1.45	\$1.30
Red	Premium	PT-0460	\$2.95	\$2.65	\$2.35
Black	Premium	PT-0461	\$2.95	\$2.65	\$2.35
Green	Premium	PT-0462	\$2.95	\$2.65	\$2.35
Red/ Black	Dual	PT-0457	\$6.95	\$6.25	\$5.50
Red	50A Jumbo	PT-0465	\$6.95	\$6.25	\$5.55
Black	50A Jumbo	PT-0466	\$6.95	\$6.25	\$5.55



## Smart Hardware Competition:

- MATTHEW MULHOLLAND, SHOPS AT JAYCAR GEPPS CROSS

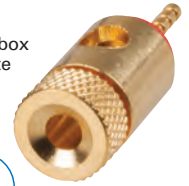
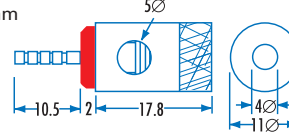
"I built a terrarium climate control system for my Son's lizard. It runs off a Raspberry Pi and developed in python. It controls the UV light and Heat Lamp."

## SPEAKER PUSH/ SCREW TERMINALS

### JUMBO SPEAKER CABLE TERMINALS

Can't fit your large speaker cable into your speaker box spring terminals? Problem solved!! Simply terminate the thick cable into these gold connectors and the 1.5mm dia. pin easily fits into speaker rear terminals.

- Cable entry is 6mm
- Gold plated



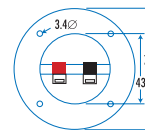
TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
Red	PT-3020	\$2.65	\$2.30	\$2.07
Black	PT-3021	\$2.65	\$2.30	\$2.07

### LARGE ROUND SPEAKER TERMINAL

Up to 16 AWG cable.

- Cutout 50mm

PT-3004



PT-3004

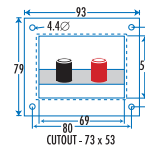


### SPEAKER BOX TERMINAL

Ideal if you are running large size speaker cable to your speakers.

- Dimensions 92(W)x79(H) mm

PT-3006



PT-3006

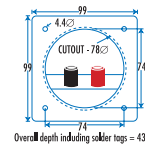


### 2 WAY GOLD TERMINALS ON A PLATE

Top quality speaker terminal.

- Plate size 99 x 99mm
- Hole cutout is round - diameter 78mm

PT-3012



PT-3012



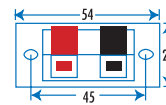
### 2 WAY - UP TO 16AWG

Up to 16AWG cable.

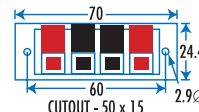
- Mounting holes: 45mm apart

- Dimensions: 54(L) x 24(W)mm

PT-3000



### 4 WAY - UP TO 16AWG



PT-3002



TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
2 Way Round	PT-3004	\$2.95	\$2.60	\$2.30
Speaker Box	PT-3006	\$6.95	\$6.25	\$5.50
2 Way Gold / Plate	PT-3012	\$11.95	\$10.70	\$9.50
2 Way	PT-3000	\$1.75	\$1.55	\$1.40
4 Way	PT-3002	\$2.95	\$2.60	\$2.30



Shop online for your Jaycar Electronics products and check out our latest products and promotions on our website.

Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)

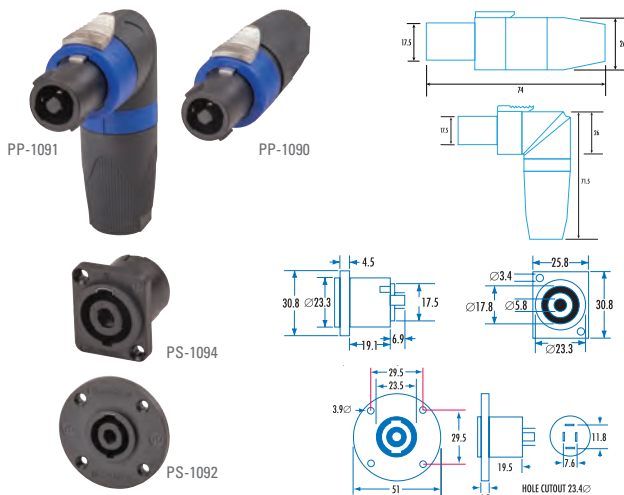




## ✓ "SPEAKON" LOUDSPEAKER PLUGS & SOCKETS

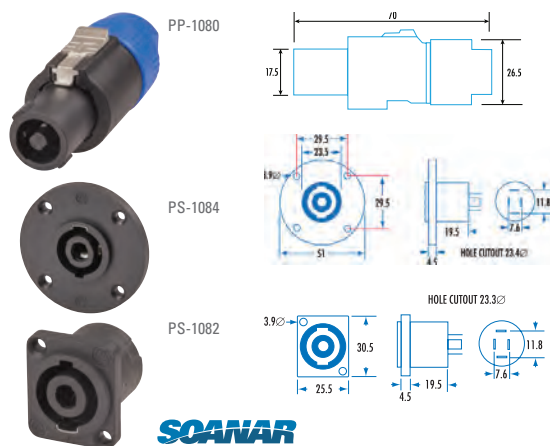
**NEUTRIK** Heavy duty, fail-safe speaker connectors

- 4 pole with Locking ring
- Solderless termination
- PS-1094 & PS-1092 hole cutout 24mm
- 30 amp continuous current
- The standard in high power PA speaker connections



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Inline Speaker Connector 4 Pole	PP-1090	\$14.95	\$13.35	\$11.70
Inline Speaker Plug	PP-1091	\$19.95	\$17.95	\$15.95
Sound Speaker Bin Chassis Mount Plastic	PS-1094	\$11.95	\$10.70	\$9.50
Square Chassis Mount Plastic	PS-1092	\$11.95	\$10.70	\$9.50

## ✓ AUDIO - ECONOMY RANGE PLUGS, SOCKETS & LEADS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Inline Speaker 4 Pole Connector	PP-1080	\$12.95	\$11.35	\$10.35
Round Speaker	PS-1084	\$9.95	\$8.75	\$7.75
Square Speaker Chassis Socket	PS-1082	\$9.95	\$8.75	\$7.75

### SPEAKON LEAD EXTENDER

Connects Speakon leads together to extend cable runs as far as you need to.

- ABS construction

CAT.	Qty 1+	Qty 4+	Qty 10+
PA-3689	\$12.95	\$11.35	\$10.35

### Related Product:

#### SPEAKON AUDIO LEADS

Excellent ready-made cable assemblies for your PA and sound reinforcement applications.

5m WA-7100 P. 471  
10m WA-7102 P. 471



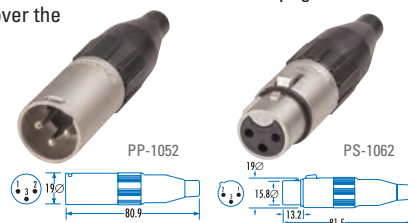
## ✓ XLR - AMPHENOL PLUGS & SOCKETS

Typically used for balanced connections such as professional microphones; these connectors are 3 pin & lock on to the socket. The confusion over whether pin 2 or 3 is hot has only relatively recently been resolved. The Standard has been defined by the Audio Engineering Society which we have outlined on the bottom of this page. Amphenol® have taken over the genuine Cannon brand.

### LINE - 3 PIN

- Solder type
- Diecast metal shell

Amphenol®



### LINE - 4 PIN

- Cannon/Amphenol Silver
- Diecast metal shell
- Nickel plated

Amphenol®



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
3 Pin - Male	PP-1052	\$7.95	\$7.15	\$6.35
3 Pin - Female	PS-1062	\$8.95	\$8.05	\$7.15
4 Pin - Male	PP-1040	\$11.95	\$10.70	\$9.50
4 Pin - Female	PS-1042	\$15.95	\$14.35	\$12.70

### AMPHENOL LTW INLINE SCREW-IN CABLE JOINER 3P 6.6-8.5MM IP68

Newly developed Cable Joiner from Amphenol LTW, UL FICX series which is compliant with UL2238 standard. The UL FICX is designed with screw terminal termination, providing quick and practical field assembly. It is IP68 rated and equipped with UV resistant materials, that can meet the needs in LED lighting, CCTV security, Solar and Marine applications. Great for environments where reliable interconnections are required. Easy grip design.



CAT.	Qty 1+	Qty 10+	Qty 50+
PT-4660	\$12.95	\$11.45	\$9.95

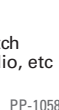
### CHASSIS MOUNT D-SERIES XLR SOCKETS

High quality Amphenol brand XLR 3 pole chassis mount sockets. Can be front or rear mounted in P or D series panels.

- 24mm hole cut-out
- D series flange
- Stamped phosphor
- Bronze contacts
- Nickel finish
- Max Wire Gauge: 14AWG
- Flammability Rating: UL94-V0
- Current Carrying Capacity: 15A

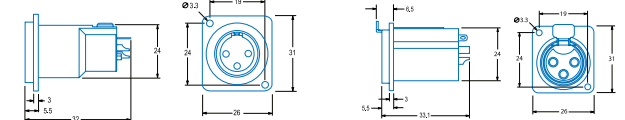
#### MALE

- Ideal for patch panels, studio, etc



#### FEMALE

- Ideal for balanced microphone inputs on mixers, patch panels



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Male	PP-1058	\$6.95	\$6.25	\$5.50
Female	PS-1054	\$8.95	\$8.05	\$7.15

## Tech Talk: XLR Wiring

The Standard is defined by the Audio Engineering Society in AES14-1992(r1998)

Pin 1: Shield/Ground

Pin 2: Hot/in Phase / +

Pin 3: Cold / Out of Phase / -

To create an unbalanced connection, pin 1 & pin 3 are connected to ground & pin 2 carries the signal. Note that there is a lot of equipment (particularly in the US) that has pin 2 & pin 3 designations reversed (i.e. 3 hot, 2 cold).

Manufacturers are adopting the Standard on all new equipment.



MALE



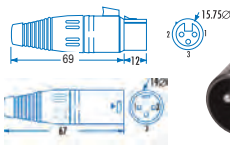
FEMALE

As seen from the front of connectors



## ✓ XLR/CANNON PLUGS, SOCKETS & ADAPTORS

### 3 PIN LINE



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
3 Pin Black - Male	PP-1012	\$4.50	\$3.95	\$3.60
3 Pin Black - Female	PS-1015	\$4.95	\$4.45	\$3.90
3 Pin R/A Black - Male	PP-1020	\$9.95	\$8.75	\$7.75
3 Pin R/A Black - Female	PS-1022	\$9.95	\$8.75	\$7.75

### WATERPROOF IP67 XLR LINE CONNECTORS

A matching IP67 waterproof plug and socket suitable for harsh environments. Great for use with PA gear and cabling that are used in outdoor conditions.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
3 Pin Black - Line Plug IP67	PP-1013	\$9.95	\$8.75	\$7.75
3 Pin Black - Line Socket IP67	PS-1017	\$9.95	\$8.75	\$7.75

### COMBO XLR / 6.35MM STEREO SOCKET SWITCHED

Combined 3 pole XLR & 6.35mm stereo jack for balanced microphone or line. It will accept 6.35mm mono, 6.35mm stereo or 3-pin male XLR. Suits D-series panel cut-outs.

- Non-locking - Panel or PCB mounting
- Switched - Independent inputs
- Gold plated contacts



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
3 Pole	PS-1069	\$9.95	\$8.75	\$7.75

### 3 PIN CHASSIS - PLASTIC

- Hole cutout 22mm
- Black ABS plastic body



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Plastic - Male	PP-1016	\$3.95	\$3.45	\$3.15
Plastic - Female	PS-1018	\$3.95	\$3.45	\$3.15

### 3 PIN CHASSIS - METAL

Black. Diecast body.



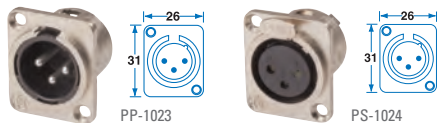
**SOANAR**

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Metal - Male - Hole cutout 20mm	PP-1010	\$4.50	\$3.95	\$3.60
Metal - Female - Hole cutout 24mm	PS-1014	\$6.50	\$5.75	\$4.95

### CHASSIS METAL

- Small size, diecast body, nickel plated
- Hole cutout 24mm

**SOANAR**



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Small Size Metal - Male	PP-1023	\$5.95	\$5.25	\$4.75
Small Size Metal - Female	PS-1024	\$6.95	\$6.25	\$5.50

### RUBBER XLR COVER BOOT

This 120mm flexible boot slips over the entire XLR - XLR connection to keep water and dust out. Indispensable for protecting permanent connections from damage & dust.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
XLR Boot Cover	PM-1034	\$1.65	\$1.45	\$1.30

### XLR 3 PIN ADAPTORS



**SOANAR**

TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Male	PA-3684	\$12.95	\$11.35	\$10.35
Female	PA-3686	\$11.95	\$10.75	\$9.55

### XLR TO 6.5MM PLUG ADAPTORS

High quality, metal construction, ideal for converting microphone leads to 6.5mm plugs.



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Female	PA-3682	\$12.95	\$11.35	\$10.35
Male	PA-3680	\$8.95	\$7.95	\$6.95

### XLR TO RCA ADAPTORS



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Male	PA-3800	\$9.95	\$8.75	\$7.75
Female	PA-3802	\$9.95	\$8.75	\$7.75

### WATERPROOF & DUST PROOF XLR PLATE MOUNT

Suitable for wet and harsh environments. Features an IPX6 rated rubber gasket and cover to prevent ingress when not in use. Surface mount via screws, hole required for socket recess.

- Dimensions: 43(L) x 35(W) x 35(D)mm



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
3 Pin - Male	PP-1014	\$7.95	\$7.15	\$6.35

## ✓ MINI XLR PLUGS & SOCKETS

### 3, 4 PIN LINE

- Diecast body - Nickel plated

**SOANAR**



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
3 Pin - Male	PP-1910	\$5.95	\$5.25	\$4.75
3 Pin - Female	PS-1924	\$6.95	\$6.25	\$5.50
4 Pin - Male	PP-1912	\$6.95	\$6.25	\$5.50
4 Pin - Female	PS-1926	\$6.95	\$6.25	\$5.50

### 3, 4 PIN CHASSIS

#### 3 PIN MALE

- Diecast - Nickel plated

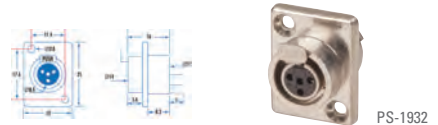
#### 3 PIN FEMALE

Cut out 15mm.



#### 4 PIN FEMALE

Cut out 15mm.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
3 Pin - Male	PP-1916	\$7.95	\$6.95	\$6.25
3 Pin - Female	PS-1930	\$9.95	\$8.75	\$7.75
4 Pin - Male	PP-1918	\$7.95	\$6.95	\$6.25
4 Pin - Female	PS-1932	\$9.95	\$8.75	\$7.75

## WALLPLATES STAINLESS STEEL

No matter what audio installation you're contemplating, you're sure to find a wallplate to give your room that pro look. Finished in attractive stainless steel, these cost-effective wallplates have all the popular audio connectors, or use a blank to customise your own. Ideal for Hi-Fi installations, home studios, home theatre or just a neat solution to running an AV extension to another room.

### XLR - BLANK

Pre-punched blanks for XLR sockets.

• Sockets not included



TYPE	CAT.	Qty 1+	Qty 2+	Qty 5+
Single Blank	PS-0551	\$4.50	\$3.95	\$3.60
Double Blank	PS-0552	\$4.95	\$4.45	\$3.90

### XLR - LOADED

Pre-punched wallplate with loaded XLR socket(s).

Looking for more wallplates?  
See page 331



TYPE	CAT.	Qty 1+	Qty 2+	Qty 5+
Single 3 pin Female XLRs	PS-0553	\$6.95	\$6.25	\$5.50
Double 3 pin Female XLRs	PS-0554	\$9.95	\$8.75	\$7.75

## WALLPLATES & SOCKETS

### DVI WALLPLATE SOCKET WITH 4 KEYSTONE PORTS

Features a DVI socket to socket joined to the wallplate with standard D-sub screws as well as 4 keystone ports. Expand your wallplate with a combination of other required sockets.

• Dimensions: 115(L) x 70(W)mm



See page 474 for other wallplates

TYPE	CAT.	Qty 1+
DVI 4 Port	YN-8057	\$7.95

### KEYSTONE WALLPLATES

Flush type wallplates accept our standard keystone 110 jacks. Fits standard Australian switch plate installation hardware and screw centres, making it perfect for easy flush installation on plasterboard or other cavity walls.

• Supplied without keystone jacks

• Dimensions: 70(W) x 114(H) x 6(D)mm

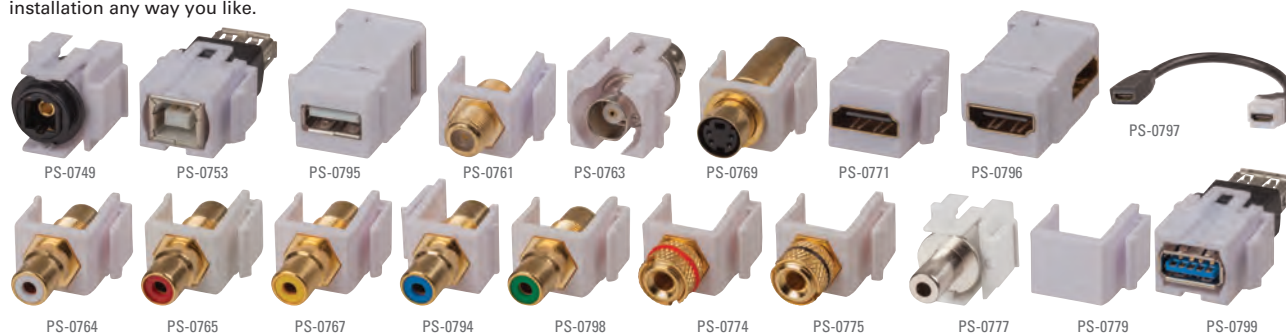


TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
Single White	YN-8050	\$1.75	\$1.55	\$1.40
Double White	YN-8052	\$1.75	\$1.55	\$1.40
Triple White	YN-8054	\$1.75	\$1.55	\$1.40
Quad White	YN-8056	\$1.75	\$1.55	\$1.40
6 Way White	YN-8058	\$1.75	\$1.55	\$1.40

## KEYSTONE INSERTS

### INSERTS FOR KEYSTONE WALLPLATES

A range of inserts to cater for computer and Audio video applications. They fit standard 110 keystone wallplates and allow you to configure your installation any way you like.



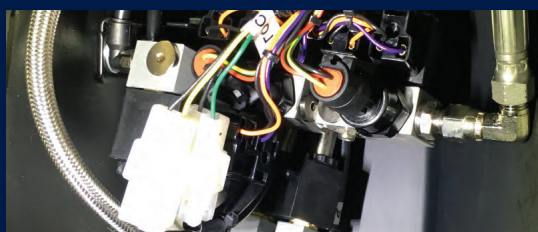
TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
TOSLINK - TOSLINK	PS-0749	\$3.95	\$3.55	\$3.15
USB - USB Female	PS-0753	\$4.95	\$4.45	\$3.95
USB - USB Right Angle	PS-0795	\$5.95	\$5.35	\$4.75
F81 - F81 - White	PS-0761	\$2.95	\$2.65	\$2.35
BNC - BNC - White	PS-0763	\$2.95	\$2.65	\$2.35
RCA - RCA - White	PS-0764	\$2.95	\$2.65	\$2.35
RCA - RCA - Red	PS-0765	\$2.95	\$2.65	\$2.35
RCA - RCA - Yellow	PS-0767	\$2.95	\$2.65	\$2.35
RCA - RCA - Blue	PS-0794	\$2.95	\$2.65	\$2.35
RCA - RCA - Green	PS-0798	\$2.95	\$2.65	\$2.35

TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
S-Video - S Video	PS-0769	\$2.95		
HDMI - HDMI - White	PS-0771	\$8.95	\$8.05	\$7.15
HDMI - HDMI - Right Angled	PS-0796	\$8.95	\$8.05	\$7.15
HDMI - HDMI - Flylead	PS-0797	\$9.95	\$8.95	\$7.95
USB - USB - White	PS-0773	\$4.95	\$4.45	\$3.95
4mm Banana - Red	PS-0774	\$3.95	\$3.55	\$3.15
4mm Banana - Black	PS-0775	\$3.95	\$3.55	\$3.15
3.5mm Stereo Socket	PS-0777	\$3.95	\$3.55	\$3.15
Blank Insert	PS-0779	\$0.35	\$0.32	\$0.28
USB 3.0-USB 3.0 - White	PS-0799	\$11.95	\$10.45	\$9.45

## Smart Hardware Competition:

- JAMES HOPE, SHOPS AT JAYCAR JOONDALUP

"This is a series of electronic pressure relief valves and solenoids used to control front and rear air lockers in a 4wd, as well as airbags for towing and tyre inflation, this allows for complete control over pressure and the ability to inflate or deflate to a set psi."

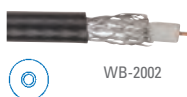




## 181



## 75 OHM COAXIAL TELEVISION CABLE & ROLLS



### BELDEN BRAND 75 OHM DOMESTIC TV COAX

This is RG59 with an OD of 6mm. Belden No. 9275.

- Inductance: .097uH/300mm
- Capacitance: 16.2pF/300mm
- Attenuation: 100MHz - 2.6db/30m, 300MHz - 4.45db/30m, 600MHz - 6.20db/30m

CAT. WB-2002



### 75 OHM RG59 GAS INJECTED FOAM COAX

New generation TV Coax. Both a braid & foil, provides 100% screening.

- Won't get water logged underground
- Black in colour
- Outside diameter 6mm

CAT. WB-2004

*Sold by the metre or by the roll.*

ROLL LENGTH	CAT.	Per Metre	1+ Roll	5+ Rolls
152m	WB-2002	\$1.15	\$139.00	\$105.00
100m	WB-2004	\$0.70	\$55.00	\$45.00

### BELDEN BRAND QUAD SHIELD RG6 75 OHM COAX

Used by Pay-TV installers. Quality Belden brand. We have repackaged in Australia on 100m reels. Normally it is only available in 1000 feet boxes. It features a solid 18AWG steel centre conductor, copper plated, gas injected polyethylene foam insulation (to keep water out), Black PVC jacket, plus 4 layers of screening: a combination of aluminium foils and braiding.

- 100% sweep tested 5MHz-1GHz



CAT. WB-2009



WB-2014

SPECIFICATIONS	BOTH
Centre Conductor	18AWG steel Cu plated 1.016 dia
Core O.D	4.572mm
Jacket O.D	7.569mm
Nom. Impedance	75Ω
Nom. Capacity	16.2pf/ft
Vel. of prop	82%, 53.1pf/m
AUSTAR Approval	F 30456
Foxtel Approval	F 30456
Belden Part	1189A

**FOXTEL APPROVED**

*Sold by the metre or by the roll.*

ROLL LENGTH	CAT.	Per Metre	1+ Roll	5+ Rolls
100m	WB-2009	\$1.80	\$100.00	\$85.00
ROLL LENGTH	CAT.	1+ Roll	4+ Rolls	10+ Rolls
30m	WB-2014	\$44.95	\$40.45	\$35.90

### 75 OHM RG59 GAS INJECTED FOAM COAX

A 30m roll is generally a common length for a domestic TV antenna installation. Save over buying by the metre, and a small roll is easy to work with.

**BLACK** CAT. WB-2005

**WHITE** CAT. WB-2001



WB-2005



WB-2001

ROLL LENGTH	COLOUR	CAT.	1+ Roll	4+ Rolls	10+ Rolls
30m	Black	WB-2005	\$19.95	\$17.95	\$15.90
30m	White	WB-2001	\$19.95	\$17.95	\$15.90

## Tech Talk

We do not sell cheap 3C-2V type TV coax. It's screening is inadequate for acceptable performance IN TODAY'S DIGITAL TV ENVIRONMENT.

## COMMUNICATION COAX CABLE



WB-2012



WB-2010



WB-2015

### 50 OHM RG58 C/U NETWORKING

As used for computer networking.

- 100m Roll Length - sold by the metre or roll

CAT. WB-2012

### 50 OHM RG58/U

Suited up to 500MHz, ideal for CB, marine, amateur and two-way radio.

- 100m Roll Length - sold by the metre or roll

CAT. WB-2010

### 50 OHM RG213/U

Communication cable commonly used in UHF.

- 100m Roll Length - sold by the metre or roll

CAT. WB-2015

CONDUCTORS	AWG	OD	CAT.	Per Metre	1+ Roll	5+ Rolls
19/0.18 + 112/0.12mm	23	5mm	WB-2012	\$1.95	\$165.00	\$135.00
19/0.18 + 112/0.12mm	23	5mm	WB-2010	\$1.45	\$120.00	\$100.00
7/0.75 + 216/0.12mm	23	10.2mm	WB-2015	\$4.50	\$379.00	\$292.00

## TELEPHONE CABLE



### 2 PAIR (4 WIRE)

Flat cable. Ivory colour, 4 x 7 x 0.12mm

- 100m Roll Length - sold by the metre or roll

CAT. WB-1620



### 3 PAIR (6 WIRE)

Flat cable. Ivory colour, 6 x 7 x 0.12mm

- 100m Roll Length - sold by the metre or roll

CAT. WB-1622



CONDUCTORS	AWG	OD	CAT.	Per Metre	1+ Roll	5+ Rolls
7/0.16mm	28	5mm	WB-1620	\$0.70	\$59.00	\$45.00
7/1.16mm	28	7mm	WB-1622	\$0.90	\$79.00	\$59.00



## Smart Hardware Competition:

- DANIEL WILLIAMS, SHOPS AT JAYCAR COBURG

"Here's an electrically-safe music control system for the shower. A magnetized puck is moved over an acrylic plate, these gestures are translated into an action (Play, Pause, Next, Previous) and sent over WiFi to a Raspberry Pi-controlled speaker system. A PIR sensor is used to calculate the user's shower lengths."



## ✓ CAT 5E / CAT 6 CABLE



### CAT 5E SOLID NETWORK

Single strand Cat 5e, used for long runs in permanent installations.

- A-Tick approved, Blue in colour, 100MHz

#### POLYWRAPPED 30M PACK - NO ROLL

CAT. WB-2023

#### 100M ROLL

CAT. WB-2022

*Sold by the metre, 30m pack or by the roll.*



ROLL LENGTH	AWG	CAT.	1+ Roll	4+ Rolls	10+ Rolls
30m	24	WB-2023	\$39.95	\$35.90	\$31.90
ROLL LENGTH	AWG	CAT.	Per Metre	1+ Roll	5+ Rolls
100m	24	WB-2022	\$1.45	\$125.00	\$94.00



### CAT 5E 8 CORE STRANDED NETWORK

An ACMA approved high quality cable for patch leads and short runs. Consists of 4 twisted pairs, each conductor 7/0.20mm copper wire, polypropylene insulated with a tough ivory colour PVC jacket. 100MHz.

CAT. WB-2020



### CAT 6 SOLID CORE UTP NETWORK

Designed for reliable high-speed networks. Suitable for IDC terminations on patch panels and wall plates. 4 x 23 AWG solid core twisted pairs. PVC spline.

CAT. WB-2030

*Sold by the metre or by the roll.*



ROLL LENGTH	AWG	CAT.	Per Metre	1+ Roll	5+ Rolls
100m	24	WB-2020	\$1.45	\$125.00	\$94.00
100m	23	WB-2030	\$1.75	\$149.00	\$115.00

## ✓ COMPUTER / DATA CABLE



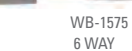
### 50 OHM RG174U COAX CABLE

Handy 20m length of unterminated RG174/U cable as commonly used in Wi-Fi and amateur radio installations. Tinned copper braid.

- Impedance: 50 ohm
- Insulation: Polyethylene (PE)
- AWG: 28

CAT. WB-2018

ROLL LENGTH		CAT.	1+ Roll	4+ Rolls	10+ Rolls
20m	RG174/U	WB-2018	\$24.95	\$21.20	\$16.20



### COMPUTER

All are screened to stop RFI.

- 6 way: 7/0.12 x 6C + foil + 7/0.16 OD 5mm
- 9 way: 7/0.12 x 9C + foil + 7/0.16 OD 5mm
- AWG: 28

CAT. WB-1575 & CAT. WB-1578

*Sold by the metre or by the roll.*

ROLL LENGTH		CAT.	Per Metre	1+ Roll	5+ Rolls
100m	6 Way	WB-1575	\$1.90	\$159.00	\$125.00
100m	9 Way	WB-1578	\$2.20	\$189.00	\$145.00

## Tech Talk: Why Our Wire Is Tinned

We now supply all multi-strand power cable with the copper conductors tinned. When you put a coating of pure tin over the copper, you prevent the copper from oxidising. This oxidising can prevent you from achieving a good, tinned solder connection to the wire. This is particularly important in marine and car installations. We have not increased our price to you for this step up in quality.

### Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck.

\*Conditions apply – see page 526 For details

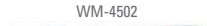
## ✓ RIBBON CABLE



### IDC RIBBON

Designed for IDC connectors. Grey in colour with red trace.

CAT. WM-4502, CAT. WM-4504, CAT. WM-4508



### RAINBOW CABLE 16 CORE

Colour coded strands of insulated conductor bonded together in a flat cable. Ideal for rewiring looms, can be split and each individual wire used. Same rating as 13 x 0.12mm light duty hook-up wire.

CAT. WM-4516

	IDC RIBBON	RAINBOW
Pitch	1.27mm (0.05")	1.27mm (0.05")
Strands	7/0.127mm	7/0.127mm
AWG	28	28

*Sold by the metre or by the roll.*

ROLL LENGTH		CAT.	Per Metre	1+ Roll	5+ Rolls
30m	16 Way	WM-4502	\$1.85	\$44.00	\$38.00
30m	26 Way	WM-4504	\$2.95	\$75.00	\$59.00
30m	50 Way	WM-4508	\$5.95	\$154.00	\$117.00
30m	16 Core	WM-4516	\$3.95	\$99.00	\$89.00

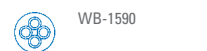
## ✓ INTERCOM / ALARM / CCTV CABLE



### BELL WIRE

Ideal for doorbells, intercoms, or anywhere where a really thin figure 8 cable is required. 7/0.10mm x 2

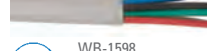
CAT. WB-1700



### ALARM - 4 CORE

Flexible stranded conductors, 7 x 0.16 in tough outer sheath.

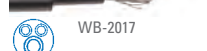
CAT. WB-1590



### ALARM - 6 CORE A-TICK APPROVED

Austel approved alarm cable. Use with alarms that have diallers. 7/0.2 x 6 flexible stranded conductors in tough outer sheath. OD 5.1mm. Colour white

CAT. WB-1598



### RG59 / POWER CABLE

Combines RG59 coaxial cable and 16G power cable. Ideal for CCTV and surveillance applications. OD: 70 x 7.5mm

CAT. WB-2017

*Sold by the metre or by the roll.*

ROLL LENGTH	AWG	CAT.	Per Metre	1+ Roll	5+ Rolls
100m	30	WB-1700	\$0.25	\$21.00	\$16.00
100m	25	WB-1590	\$0.80	\$65.00	\$45.00
100m	24	WB-1598	\$1.75	\$129.00	\$119.00
100m	25	WB-2017	\$1.60	\$139.00	\$105.00



### ALARM CABLE

7 x 0.16mm, 4 core

CAT. WB-1591



### ALARM CABLE - A-TICK APPROVED

Austel approved. For use in alarms with diallers. 6 x 7/0.2 flexible stranded conductors in tough outer sheath.

CAT. WB-1596

*Sold by the 30m roll.*

ROLL LENGTH	AWG	CAT.	1+ Roll	4+ Rolls	10+ Rolls
30m	25	WB-1591	\$21.95	\$19.70	\$17.55
30m	24	WB-1596	\$44.95	\$40.45	\$35.90



## COAXIAL - PAL PLUGS & SOCKETS

These are the standard aerial connectors for TVs and video recorders. They are often called "Belling-Lee" or "PAL" connectors.

- Generally Nickel plated
- Some are machined out of aluminium

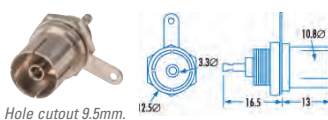
### 75 OHM LINE PLUGS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Plastic	PP-0600	\$1.95	\$1.75	\$1.55
Nickel Plated	PP-0602	\$2.45	\$2.15	\$1.95
Gold Plated	PP-0604	\$7.95	\$6.95	\$6.25
R/A Solderless	PP-0606	\$2.95	\$2.60	\$2.30
Crimp - RG59	PP-0607	\$2.95	\$2.60	\$2.30
Crimp - RG6	PP-0608	\$2.95	\$2.60	\$2.30
Joiner	PS-0622	\$1.75	\$1.55	\$1.40

### 75 OHM CHASSIS MOUNT SOCKET

- Nickel plated
- High quality product



CAT.	Qty 1+	Qty 10+	Qty 50+
PS-0628	\$2.95	\$2.60	\$2.30

### 75 OHM LINE SOCKETS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Plastic	PS-0610	\$1.75	\$1.55	\$1.40
Nickel Plated	PS-0614	\$2.45	\$2.15	\$1.95
Right Angle Solderless	PS-0612	\$3.45	\$3.05	\$2.75
Crimp - RG59	PS-0611	\$2.75	\$2.45	\$2.15
Crimp - RG6	PS-0613	\$2.75	\$2.45	\$2.15
Gold	PS-0605	\$7.95	\$6.95	\$6.25
Joiner	PS-0620	\$1.75	\$1.55	\$1.40

### 75 OHM CABLE JOINER

Hardwire connection of 50Ω or 75Ω coax cable.

- Works with 50Ω to 50Ω as well
- Basically will even connect screened audio cable too

CAT.	Qty 1+	Qty 4+	Qty 10+
PS-0618	\$2.95	\$2.60	\$2.30

## COAXIAL - ADAPTORS



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
PAL Plug to RCA Socket	PA-3675	\$3.95	\$3.45	\$3.15
PAL Socket to PAL Socket	PS-0620	\$1.75	\$1.55	\$1.40
PAL Plug to PAL Plug	PS-0622	\$1.75	\$1.55	\$1.40
PAL Plug to PAL Socket - Right Angle	PA-3679	\$4.95	\$4.45	\$3.90
F Socket to PAL Socket	PA-3656	\$3.95	\$3.45	\$3.15
PAL Plug to F-81	PA-3653	\$3.95	\$3.45	\$3.15
PAL Plug to F81 Socket - Right Angle	PA-3673	\$4.95	\$4.45	\$3.90
F-59 Plug to PAL Socket	PA-3672	\$1.95	\$1.75	\$1.55
F-59 Plug to PAL Plug	PA-3671	\$2.95	\$2.60	\$2.30
F-59 Plug to F-81 Socket - Right Angle	PA-3674	\$3.95	\$3.45	\$3.15
F-59 Plug to Plug	PA-0633	\$1.65	\$1.45	\$1.30

## COAXIAL - F TYPE PLUGS, SOCKETS & ADAPTORS

Used mainly for RF signals such as those for satellite dishes, cable boxes or TV aerials. The highest quality connections between your cable/satellite wallplate output and the cable/satellite box. Standard emerged from the US cable TV industry. Now the Aust./NZ standard.

See pages 228 for Crimping Tools & page 182 for Coaxial Cable

### F TYPE PLUGS

F connectors recommended for all new TV installations

- Suits RG59 or RG6 cable
- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Suits RG59	PP-0640	\$0.95	\$0.85	\$0.75
Suits RG6	PP-0641	\$1.25	\$1.10	\$1.00
F-59 Crimp Plug for RG59	PP-0702	\$1.95	\$1.75	\$1.55
F-59 Crimp Plug for RG6 Cable	PP-0704	\$1.95	\$1.75	\$1.55
F-59 Waterproof Compression Plug for RG6 Cable	PP-0708	\$1.95	\$1.75	\$1.55



### Smart Hardware Competition:

- DAVID WHYBREW, SHOPS AT JAYCAR ASPLEY

"Old slide projector with functioning optics, retrofitted with 10W LED and some recycled heatsinking and fans. Oil projector wheel with customized rotator. Controlled by an arduino to LED cooling and control rotator speed. Next step is to add a DMX shield to control from a standard lighting controller."

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.



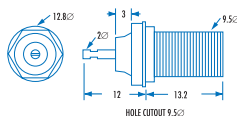


## COAXIAL - F TYPE PLUGS, SOCKETS & ADAPTORS

### F-61 CHASSIS SOCKET

Hole cutout 9.5mm.

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
F-61 Chassis	PS-0645	\$1.75	\$1.55	\$1.40

### F-59 TYPE SCREW-ON PLUGS

These are ideal crimpless but strong F-plugs for low volume applications. Highly recommended. Simply strip coax back about 12mm, fold braid/foil back over the plastic outer sheath. Trim about 8mm of foam insulation from centre conductor. Then simply screw the knurled connector on the cable until you see sufficient centre conductor out of the front of the connector.

- Nickel plated



PP-0637

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Suits RG59 Cable	PP-0637	\$1.45	\$1.30	\$1.15
Suits RG6 Cable	PP-0638	\$1.45	\$1.30	\$1.15

### CRIMPLESS F-TYPE PLUG TO RG6

No crimping or soldering required.



CAT.	Qty 1+	Qty 10+	Qty 50+
PP-0671	\$2.95	\$2.60	\$2.30

### F-59 TOOL-LESS COMPRESSION CRIMP CONNECTOR

No crimping tool required. Just strip back the outer and inner sheath, fold the braid back and push the connector on. The crimp is reliable with high mechanical strength and will never come off. Suitable for RG6 quad shield coax.



CAT.	Qty 1+	Qty 10+	Qty 50+
PP-0677	\$2.50	\$2.21	\$1.95

### F-59 LINE PLUG - SOLDERLESS TYPE

Screw assembly - no soldering is required.



CAT.	Qty 1+	Qty 10+	Qty 50+
PP-0709	\$2.95	\$2.60	\$2.30

### F-59 TYPE 75 OHM DUMMY LOAD

Simply screw on to unused ports of splitters, etc to maintain good VSWR.

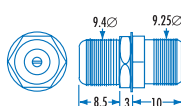
- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Dummy Load	PP-0639	\$1.50	\$1.35	\$1.20

### F-81 INLINE JOINER

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
F-81 Inline Joiner	PS-0646	\$1.95	\$1.75	\$1.55

### F-81 INLINE JOINER - FOXTEL APPROVED

- Socket to Socket
- Foxtel Approved



CAT.	Qty 1+	Qty 4+	Qty 10+
PP-0648	\$4.95	\$4.45	\$3.90

### TOOL-LESS F59 RG6 PLUG

Just strip the end of your RG6 coax cable and apply the connector. No crimping tools, no soldering and nothing could be simpler!



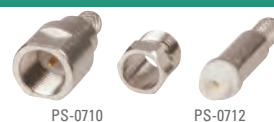
CAT.	Qty 1+	Qty 10+	Qty 50+
PP-0601	\$1.49	\$1.34	\$1.19

## FME

### FME LINE

As used on some mobile phone car kits

- Crimp
- Nickel plated
- Gold centre pin



See page 228 for crimp tools.

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Plug	PP-0710	\$4.95	\$4.45	\$3.90
Socket	PS-0712	\$3.95	\$3.45	\$3.15

### FME - TNC

Female Adaptor



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Female to Female	PA-0619	\$5.95	\$5.25	\$4.75

### FME PLUG TO PL259 UHF PLUG ADAPTOR



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Plug to Plug	PA-0611	\$8.95	\$8.05	\$7.15

## TNC

### LINE PLUGS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Solder	PP-0664	\$3.95	\$3.45	\$3.15
Crimp - RG58U	PP-0665	\$3.95	\$3.45	\$3.15
Crimp - RG59U	PP-0667	\$3.95	\$3.45	\$3.15

## N TYPE



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Line Plug - suits RG58U	PP-0672	\$5.95	\$5.25	\$4.75
Line Socket - suits RG58U	PS-0673	\$6.95	\$6.25	\$5.50
Panel Socket	PS-0674	\$6.95	\$6.25	\$5.50

ALL PRODUCTS ON THIS PAGE GENERALLY NICKEL PLATED



### Smart Hardware Competition:

- ANDY GOSLING, SHOPS AT JAYCAR CHRISTCHURCH

"Portable DVD player. The Jaycoins cards would improve it to receive tv channels. add Bluetooth and solar charging capabilities."



## ▼ BNC

BNC plugs lock on to the socket and are used for some digital audio connections as well as for video connections, particularly CCTV.

### MALE LINE



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Male Line Plugs	PP-0650	\$3.25	\$2.90	\$2.60
Crimp RG59	PP-0688	\$3.25	\$2.90	\$2.60
Crimp RG6	PP-0689	\$4.95	\$4.45	\$3.90
Solderless Type	PP-0652	\$4.95	\$4.45	\$3.90

### CRIMPLESS BNC PLUG TO RG6

No crimper or soldering required.

- Crimless BNC Plug to RG6



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Crimless BNC Plug to RG6	PP-0675	\$3.95	\$3.55	\$3.15

### MALE CRIMP PLUGS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
0.7mm Centre Pin - suits RG59	PP-0647	\$2.95	\$2.60	\$2.30
0.9mm Centre Pin - suits Belden	PP-0651	\$2.95	\$2.60	\$2.30
Crimp Type - RG58	PP-0649	\$2.95	\$2.60	\$2.30
Crimp Type - RG6	PP-0657	\$3.95	\$3.45	\$3.15
Compression Crimp	PP-0669	\$3.95	\$3.45	\$3.15

### CRIMP PLUG BOOT

Suits - PP-0695 Mini UHF plug, PS-0660 BNC female line crimp, PP-0649 BNC RG58 Crimp plug & PP-0651 BNC RG59 Crimp plug.



TYPE	CAT.	Qty 1+	Qty 5+	Qty 20+
	PM-0648	\$1.95	\$1.75	\$1.55

### MALE TWIST ON PLUGS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Twist on for RG59 0.9mm centre	PP-0678	\$3.95	\$3.45	\$3.15
Twist on for RG6	PP-0679	\$4.95	\$4.45	\$3.90
Terminator plug with 50Ω resistor	PP-0655	\$4.95	\$4.45	\$3.90

### LINE SOCKETS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Line Socket - RG58	PS-0660	\$4.95	\$4.45	\$3.90
Line Socket - RG6	PS-0659	\$4.95	\$4.45	\$3.90
Joiner	PS-0663	\$3.95	\$3.45	\$3.15

### CHASSIS SOCKETS

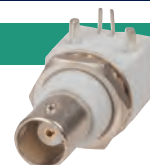
Hole cutout 9.5mm.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Square Mount	PS-0656	\$2.95	\$2.60	\$2.30
Single Hole Mount	PS-0658	\$3.95	\$3.45	\$3.15
Double Female Mount	PS-0662	\$4.45	\$3.95	\$3.45

### BNC PCB

- PCB connect with optional panel screw fixing



TYPE	Cat.	Qty 1+	Qty 10+	Qty 50+
Panel Screw	PS-0661	\$7.95	\$6.95	\$6.25

### BNC WITH TERMINALS



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Screw Terminal	PA-3715	\$4.95	\$4.45	\$4.00
Spring Terminal	PA-3716	\$4.95	\$4.45	\$4.00

### BNC ADAPTORS



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
BNC Plug to F59 Plug Adaptor	PA-3661	\$4.95	\$4.45	\$3.90
BNC Adaptor 1 Male to 2 Female - T	PA-3662	\$5.95	\$5.25	\$4.75
BNC Adaptor 1 Male to 2 Female - Y	PA-3664	\$9.95	\$8.75	\$7.75
BNC T Adaptor	PA-3660	\$4.95	\$4.45	\$3.90
BNC Male to Double Binding Sockets/ Banana Sockets	PA-3666	\$8.95	\$7.95	\$6.95
BNC Plug to BNC Plug Adaptor	PA-3665	\$4.95	\$4.45	\$3.90
BNC Plug to F-81 Socket	PA-3651	\$1.95	\$1.75	\$1.55
BNC Plug to RCA Socket	PA-3654	\$3.95	\$3.45	\$3.15
PL259 Plug to BNC Socket	PA-3652	\$6.95	\$6.25	\$5.50
PL259 Plug to BNC Plug	PA-0681	\$3.95	\$3.45	\$3.15
BNC Plug to BNC Socket R/A	PA-3663	\$4.95	\$4.45	\$3.90

## ▼ RJ11/12 MODULAR

50µ" Gold Contact.

4 PIN FOR STRANDED CABLE

4/4 - RJ11



6 PIN FOR STRANDED CABLE

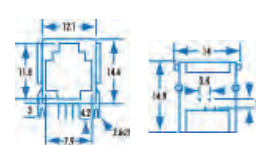
6/6 - RJ12



TYPE	CAT.	Qty 1+	Qty 5+	Qty 20+
RJ11 - Pack of 5	PP-1430	\$2.45	\$2.15	\$1.95
RJ11 - Pack of 50	PP-1431	\$19.95	\$17.95	\$15.95
RJ12 - Pack of 5	PP-1432	\$2.95	\$2.60	\$2.30
RJ12 - Pack of 50	PP-1433	\$23.95	\$21.35	\$18.95

### PCB MODULAR SOCKETS

Side entry.  
Not ACMA Approved



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
4/4 - RJ11	PS-1470	\$1.65	\$1.45	\$1.30
6/6 - RJ12	PS-1474	\$1.95	\$1.75	\$1.55





## RJ45 MODULAR

### MODULAR PLUGS

50µ" Gold Contact

8/8 - RJ45

• Not ACMA Approved

PACK	CAT.	Qty 1+	Qty 5+	Qty 20+
10	PP-1436	\$7.95	\$6.95	\$6.25



### SCREENED 8 PIN FOR STRANDED CABLE

8P8C with full screening and round cable entry for connection to STP cable.



PACK	CAT.	Qty 1+	Qty 5+	Qty 20+
10	PP-1437	\$14.95	\$13.35	\$11.70

### RJ45 MODULAR PLUGS FOR STRANDED/SOLID CAT 6 CABLE PK10

RJ45 Modular Plugs for Stranded and Solid Cat 6 Cable. Pack of 10.



TYPE	PACK	CAT.	Qty 1+	Qty 5+	Qty 20+
RJ45 Stranded	10	PP-1447	\$13.95	\$12.35	\$10.95

### 8 PIN FOR FLAT STRANDED CABLE

8/8 - RJ45



PP-1434



### 8 PIN FOR ROUND SOLID CORE CABLE

8/8 RJ45 Suits Cat5e



PP-1438



TYPE	PACK	CAT.	Qty 1+	Qty 5+	Qty 20+
RJ45 Strandard	5	PP-1434	\$5.95	\$5.25	\$4.75
RJ45 Strandard	50	PP-1435	\$29.95	\$26.95	\$23.95
RJ45 Solid	6	PP-1438	\$6.95	\$6.25	\$5.50
RJ45 Solid	50	PP-1439	\$34.95	\$31.45	\$27.90

### RJ45 BOOTTS

A packet of boots to suit RJ45 8/8 plugs.

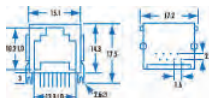
PM-1441



PACK	CAT.	Qty 1+	Qty 5+	Qty 20+
10	PM-1441	\$4.95	\$4.45	\$4.15
50 Blue	PM-1442	\$15.95	\$14.35	\$12.75

### 8 PIN PCB MODULAR SOCKET

• Side entry  
• Not ACMA approved



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
8/8 - RJ45	PS-1478	\$2.45	\$2.15	\$1.95

### WATERPROOF RJ45 CABLE CONNECTOR HOUSING

Allows you to join two Cat5e cables while providing a robust and waterproof connection. Use around the garage, factory or workshop to avoid dust or water ingress, or to survive the knocks and bumps around the office. Includes 2-way Cat5 joiner, but will also accommodate any connector that fits within the internal dimensions of the housing.

- IP Rating: IP68
- Accepts cables: 4 - 7mm Dia
- Dimensions: 120(L) x 35(Dia.)mm

\*Not ACMA approved.



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	PS-4064	\$19.95	\$17.95	\$15.95

## TELEPHONE

### TYPE 610 TYPE WALL SKT

For other telephone leads, adaptors - see our Computer & Multimedia section

- Blister pack
- ACMA Approved

Also see page 331 for wallplates to suit.

\* Note: not available in New Zealand.

TYPE	CAT.	Qty 1+	Qty 5+	Qty 20+
610	PS-1410	\$6.95	\$6.25	\$5.50



## WALLPLATES & KEYSTONE SOCKETS

### AUSTRALIAN / NZ FLUSH PLATES

Our premium Australian / NZ flush plates not only accept our Cat 5e jacks, they are also compatible with many other standard Australian mechanisms and jacks.

- Fits standard Australian/NZ switch plates
- Perfect for easy flush installation on Gyprock walls
- Supplied unloaded without jacks (see Cat. YN-8036)
- 116(W) x 75(H) x 13(D)mm



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
Single	YN-8015	\$5.95	\$5.25	\$4.75
Double	YN-8016	\$5.95	\$5.25	\$4.75
Triple	YN-8017	\$5.95	\$5.25	\$4.75

### RJ12 IDC SOCKET FOR FLUSH PLATES

Voice grade RJ12 6P4C IDC jack with 2 IDC connections per contact allowing easy loop-in, loop-out for typical voice applications. Compatible with most standard Australian flush plates. Rear termination with IDC impact tool.

CAT.	Qty 1+	Qty 5+	Qty 20+
YN-8035	\$9.95	\$8.75	\$7.75



### CAT 5E IDC JACK TO SUIT AUSTRALIAN & NZ STYLE FLUSH PLATES

Our premium Cat 5e IDC data jack designed to suit our wallplates shown above. They also suit many other brands of Australian/NZ flush plates.

- Rear terminated with 110 or Krone impact tool
- T568A & T568B colour coding for easy installation
- Suit YN-8015/16/17 flush plates

CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8036	\$9.95	\$8.75	\$7.75



### INSERTS FOR KEYSTONE WALLPLATES



TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
RJ11	YN-8026	\$3.95	\$3.55	\$3.15
RJ12	YN-8027	\$3.95	\$3.55	\$3.15
RJ45 Cat5e	YN-8028	\$3.95	\$3.55	\$3.15
RJ45 Cat6	YN-8029	\$3.95	\$3.55	\$3.15

### 110 KEYSTONE JACK

Suitable for use with our keystone wall plates and keystone surface boxes.

- For termination with ISBY impact tool and has combined 568A and T568B colour coding for easy installation
- White in colour

CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8030	\$9.95	\$8.75	\$7.75



### KEYSTONE SURFACE BOX

Side entry surface mount boxes accept our standard keystone 110 jacks.

- Snap-on cover for easy access to wiring
- Double sided tape for easy installation
- Supplied unloaded without keystone jacks



W X H X D (MM)	CAT.	Qty 1+	Qty 4+	Qty 10+
Single 30 x 60 x 26	YN-8022	\$5.95	\$5.25	\$4.75
Double 55 x 60 x 26	YN-8024	\$5.95	\$5.25	\$4.75

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.



## USB/HDMI

### TYPE A & TYPE B PLUGS

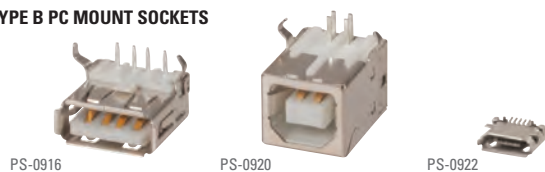
With solder lugs.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
A	PP-0790	\$2.45	\$2.15	\$1.95
B	PP-0792	\$2.45	\$2.15	\$1.95

### TYPE A & TYPE B PC MOUNT SOCKETS

4P4C.



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
A	PS-0916	\$2.95	\$2.60	\$2.30
B	PS-0920	\$2.95	\$2.60	\$2.30
Micro B	PS-0922	\$2.95	\$2.60	\$2.30

### TYPE A IP67 RATED PLUG CABLES

Industrial USB connectors encased in robust housing with IP67 seal.

- Current rating 1.5A
- -40° to +105°C
- PBT UL94V-0 body

**LTW**



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
A Male 1m Lead	PP-0784	\$13.95	\$12.55	\$11.15

### TYPE A PANEL MOUNT USB SOCKETS

Panel-mounting Type A USB socket.

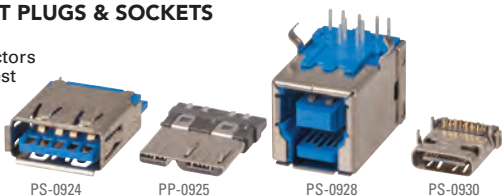
- Suits panels up to 10mm thick
- Mounting hole 20mm



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
A Female	PS-0782	\$19.95	\$17.95	\$15.95

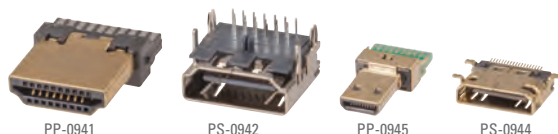
### PCB MOUNT PLUGS & SOCKETS

A range of PC mount connectors to suit the latest USB & HDMI technologies.



#### USB

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Type-A 3.0 Male	PP-0923	\$3.95	\$3.55	\$3.15
Type-A 3.0 Female	PS-0924	\$3.95	\$3.55	\$3.15
Type-A Micro 3.0 Male	PP-0925	\$3.95	\$3.55	\$3.15
Type-A Micro 3.0 Female	PS-0926	\$3.95	\$3.55	\$3.15
Type-B 3.0 Female	PS-0928	\$3.95	\$3.55	\$3.15
Type-C 2.0/3.0/3.1 Male	PP-0929	\$3.95	\$3.55	\$3.15
Type-C 3.1 Female	PS-0930	\$3.95	\$3.55	\$3.15



#### HDMI

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Type-A Male	PP-0941	\$3.95	\$3.55	\$3.15
Type A Female	PS-0942	\$3.95	\$3.55	\$3.15
Micro Male	PP-0945	\$3.95	\$3.55	\$3.15
Micro Female	PS-0946	\$3.95	\$3.55	\$3.15
Mini Plug	PP-0943	\$3.95	\$3.55	\$3.15
Mini Female	PS-0944	\$3.95	\$3.55	\$3.15

## SCART

Carries stereo audio, composite video, S-video & RGB signals from AV source to your TV & also allow recording to other sources, for example VCR's. Originated in Europe.

### SCART ADAPTOR

SCART Plug to 3 RCA sockets & a S-Video Socket.



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
SCART Adaptor	PA-3659	\$14.95	\$13.35	\$11.70

## SMA

### SMA CONNECTORS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Line Plug - RG58 - Crimp	PP-0632	\$5.65	\$4.95	\$4.45
Right Angle Plug - RG174 - Crimp	PP-0631	\$5.95	\$5.25	\$4.75
Line Socket - RG174 - Solder	PS-0634	\$4.95	\$4.45	\$3.90
Line Plug - RG58 - Crimp - R/A	PP-0633	\$5.95	\$5.35	\$4.75

### SMA REVERSE

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Reverse Line Plug - RG174U	PP-0590	\$5.95	\$5.25	\$4.75
Reverse Line Socket	PS-0592	\$5.95	\$5.25	\$4.75

### SMA ADAPTORS

- Nickel plated



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
SMA Socket to Reverse SMA Plug	PA-0627	\$6.95	\$6.25	\$5.50
SMA Socket to Reverse SMA Socket	PA-0629	\$6.95	\$6.25	\$5.50
SMA Plug to Reverse SMA Plug	PA-0628	\$6.95	\$6.25	\$5.50
SMA Plug to PL259 Socket	PA-0612	\$7.95	\$7.10	\$6.25
FME Socket to SMA Socket	PA-0620	\$4.95	\$4.45	\$3.90
SMA Socket to FME Plug	PA-0621	\$4.95	\$4.45	\$3.90
SMA Plug to SMA Plug	PA-0622	\$4.95	\$4.45	\$3.90
SMA Socket to BNC Socket	PA-0624	\$4.95	\$4.45	\$3.90
SMA Plug to BNC Socket	PA-0615	\$5.95	\$5.25	\$4.75
N Plug to SMA Socket	PA-0616	\$6.95	\$6.25	\$5.50
N Socket to SMA Socket	PA-0617	\$6.95	\$6.25	\$5.50
SMA Coupler	PA-0635	\$6.95	\$6.25	\$5.50
SMA Socket to PL259 UHF Plug	PA-0613	\$8.95	\$8.05	\$7.15
SMA Plug to FME Plug	PA-0618	\$5.95	\$5.35	\$4.75
SMA Plug to SMA Plug - R/A	PA-0631	\$6.95	\$6.25	\$5.55
SMA Socket to SMA Socket - R/A	PA-0632	\$6.95	\$6.25	\$5.55
SMA Plug to Reverse SMA Socket	PA-0630	\$6.95	\$6.25	\$5.55



## UHF PLUGS & SOCKETS

### UHF - MINI MALE LINE PLUGS

- Nickel plated

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Crimp - RG58U	PP-0695	\$4.95	\$4.45	\$3.90
Crimp - RG59	PP-0694	\$4.95	\$4.45	\$3.90

### UHF LINE PLUGS - PL259 TYPE

- Nickel plated

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Solder - RG-58U - with Reducer	PP-0680	\$2.95	\$2.60	\$2.30
Solder - RG-8U	PP-0682	\$2.95	\$2.60	\$2.30

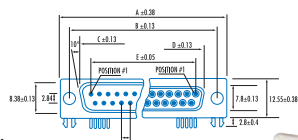
### UHF JOINER & SOCKET

- Nickel plated

TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Joiner - Double Female	PS-0690	\$3.95	\$3.45	\$3.15
S0239 Chassis Socket	PS-0686	\$2.95	\$2.60	\$2.30

## D CONNECTORS PLUGS, SOCKETS & HARDWARE

### D - IDC



Sizes shown in mm.

SIZE	A	B	C	D	E	F
9 Pin	30.81	24.99	16.92	16.24	11.09	2.74
25 Pin	53.04	47.04	38.96	38.38	33.24	2.77

TYPE	PIN	CAT.	Qty 1+	Qty 10+	Qty 50+
IDC Plug	9 Pin	PP-0802	\$3.95	\$3.45	\$3.15
IDC Plug	15 Pin	PP-0821	\$4.45	\$3.95	\$3.45
IDC Plug	25 Pin	PP-0842	\$4.65	\$4.15	\$3.60
IDC Socket	9 Pin	PS-0805	\$3.95	\$3.45	\$3.15
IDC Socket	15 Pin	PS-0825	\$4.45	\$3.95	\$3.45
IDC Socket	25 Pin	PS-0846	\$4.65	\$4.15	\$3.60

### D MALE / FEMALE MALE SOLDER

All 'D' connectors have quality gold plated contacts & nickel plated shells.

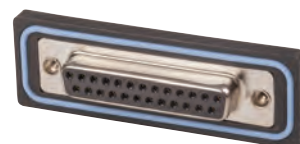
TYPE	PIN	CAT.	Qty 1+	Qty 10+	Qty 50+
Plug Solder	9 Pin	PP-0800	\$1.45	\$1.30	\$1.15
Plug Solder	15 Pin	PP-0820	\$1.95	\$1.75	\$1.55
Plug Solder	15HD Pin	PP-0831	\$3.65	\$3.15	\$2.90
Plug Solder	25 Pin	PP-0840	\$1.95	\$1.75	\$1.55
Plug Solder	37 Pin	PP-0860	\$4.95	\$4.45	\$3.90
Socket Solder	9 Pin	PS-0804	\$1.95	\$1.75	\$1.55
Socket Solder	15 Pin	PS-0824	\$1.95	\$1.75	\$1.55
Socket Solder	15HD Pin	PS-0832	\$3.65	\$3.15	\$2.90
Socket Solder	25 Pin	PS-0844	\$1.95	\$1.75	\$1.55
Socket Solder	37 Pin	PS-0864	\$4.95	\$4.45	\$3.90
R/A Plug Solder	9 Pin	PP-0803	\$2.95	\$2.60	\$2.30
R/A Plug Solder	25 Pin	PP-0843	\$3.65	\$3.15	\$2.90
R/A Socket Solder	9 Pin	PS-0806	\$2.95	\$2.60	\$2.30
R/A Socket Solder	25 Pin	PS-0845	\$3.65	\$3.15	\$2.90

### D-SUB SOCKET IP67 HARSH ENVIRONMENT

Robust D-Sub socket housed in industrial body and IP67 waterproof housing.

- Current rating 5A
- -40° to +105°C
- Gold flash plating on contacts

LTW



TYPE	PIN	CAT.	Qty 1+	Qty 10+	Qty 50+
Socket Solder	25 Pin	PS-1220	\$19.95	\$17.95	\$15.95

### D BACKSHELLS

#### PLASTIC

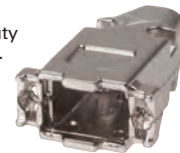
Screws supplied.



#### METAL

Quality heavy duty metal backshells.

- Ideal where RF screening is required
- Rear entry



### ABS FLAMEPROOF D BACKSHELLS

Top quality grey back shells with two cable entries.

- Rear or side entry
- Simply push out the tab required
- Supplied with 2 long finger screws, cable clamp screws and hood fixing screws
- A quality range of backshells



TYPE	PIN	CAT.	Qty 1+	Qty 10+	Qty 50+
Plastic D Backshells	9 Pin	PM-0808	\$2.25	\$1.95	\$1.80
Plastic D Backshells	15 Pin	PM-0828	\$2.45	\$2.15	\$1.95
Plastic D Backshells	25 Pin	PM-0848	\$2.95	\$2.60	\$2.30
Plastic D Backshells	37 Pin	PM-0868	\$3.95	\$3.45	\$3.15
Metal D Backshells	9 Pin	PM-0812	\$3.95	\$3.45	\$3.15
Metal D Backshells	15 Pin	PM-0833	\$4.95	\$4.45	\$3.90
Metal D Backshells	25 Pin	PM-0847	\$6.95	\$6.25	\$5.50
ABS D Backshells	9 Pin	PM-0810	\$2.95	\$2.60	\$2.30
ABS D Backshells	15 Pin	PM-0830	\$3.25	\$2.90	\$2.60
ABS D Backshells	25 Pin	PM-0850	\$3.95	\$3.45	\$3.15

### D HARDWARE

#### SUB HEX NUT EXTENDERS

Pkt of 8 pairs (16 pcs) 6mm hex nut extenders for D connectors.

- Double female screw adaptor
- Pack of 8 pairs



#### THUMB SCREWS FOR D BACKSHELLS

Pkt of 4 pairs (8 pcs) of universal thumb screws for D backshells.

- Total length 44mm
- Pack of 4 pairs



#### LOCKING NUTS FOR D CONNECTORS

Packets of 5 pairs (10 pcs.) of D locking nuts.

- Includes screws, nuts and washers
- 6mm length
- Pack of 5 pairs



#### JACK SCREW TO SUIT D-SUB

- 13mm length

PM-0859



TYPE	PACK	CAT.	Qty 1+	Qty 10+	Qty 50+
Hex Nut Extenders	8	PM-0857	\$4.95	\$4.45	\$3.90
Thumb Screws	4	PM-0859	\$4.95	\$4.45	\$3.90
Jack Screw	EA	PM-0854	\$0.75	\$0.65	\$0.60
Jack Screw Locking	5	PM-0852	\$4.95	\$4.45	\$3.90

### LOCKING NUT SET FOR D-CONNECTORS

Suits D connectors.

- Length 13mm



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Hex Nut Extenders	PM-0855	\$2.95	\$2.60	\$2.30

**NOT SURE WHAT TO BUY?**

Give a Jaycar Gift Card and let them choose!





## ▼ HEADER CONNECTORS

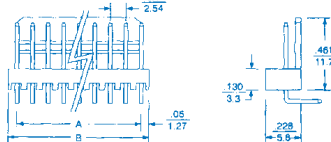
### 0.1" (2.54MM) LOCKING & POLARISING HEADER CONNECTORS

A range of connectors for PCB mounting that allow circuit boards to be plugged together at right angles or end-to-end, or cables to be plugged onto circuit boards at right angles or end-on at the edge of the PCB. Both plugs and sockets may be butted up end-to-end to form connectors with any number of ways from 2 upwards. Both plugs are wafer design into which square, tin-plated brass pins have been inserted. These pins protrude 3.4mm on one side, and should be soldered to the PCB. The nylon wafer sits on the PCB and is 3.3 mm thick. The back provides locking and polarising.

- 0.9mm PCB drill hole



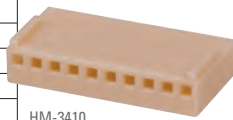
Suitable crimping tool for 0.1" header sockets is our Cat. TH-1834.



TECHNICAL INFORMATION	ALL MODELS
Voltage	250V
Current: Brass Crimp/Tin plated	2.5A max. (solderable)
Contact Resistance	20mΩ max
Dielectric Withstanding Voltage	1500VAC
Insulation Resistance	50MΩ
Contact Insertion Force	681g
Contact Retention to Housing	3.63kg
Mating Force	199g max
Normal Force	200g min
Housing	UL 94v-0 White nylon
Temperature	0 to +75°C

#### 0.1" HEADER SOCKETS, LOCKING & POLARISED

PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3402	\$0.50	\$0.45	\$0.40
3	HM-3403	\$0.55	\$0.47	\$0.42
4	HM-3404	\$0.65	\$0.57	\$0.50
6	HM-3406	\$0.75	\$0.65	\$0.60
8	HM-3408	\$0.95	\$0.85	\$0.75
10	HM-3410	\$1.10	\$0.95	\$0.85



#### 0.1" PIN PCB PLUG (STRAIGHT ENTRY, LOCKING & POLARISED)

PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3412	\$0.20	\$0.18	\$0.16
3	HM-3413	\$0.30	\$0.25	\$0.24
4	HM-3414	\$0.40	\$0.35	\$0.30
6	HM-3416	\$0.60	\$0.52	\$0.47
8	HM-3418	\$0.80	\$0.70	\$0.62
10	HM-3420	\$1.00	\$0.90	\$0.80



#### 0.1" PIN PCB PLUG (RIGHT ANGLE ENTRY, LOCKING & POLARISED)

PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3422	\$0.30	\$0.25	\$0.24
3	HM-3423	\$0.35	\$0.30	\$0.27
4	HM-3424	\$0.40	\$0.35	\$0.30
6	HM-3426	\$0.60	\$0.52	\$0.47
8	HM-3428	\$0.80	\$0.70	\$0.62
10	HM-3430	\$0.90	\$0.80	\$0.70



### 0.156" (4MM) HEADER SOCKETS, LOCKING & POLARISED

(Includes crimp Pins)

Crimper to suit Cat TH-1834.

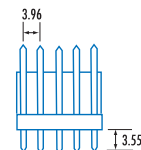
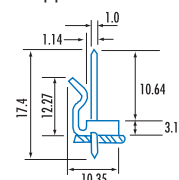
PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3432	\$0.80	\$0.70	\$0.62
3	HM-3433	\$0.90	\$0.80	\$0.70
4	HM-3434	\$1.00	\$0.90	\$0.80
6	HM-3436	\$1.30	\$1.15	\$1.01
8	HM-3438	\$1.40	\$1.25	\$1.10
10	HM-3440	\$1.50	\$1.35	\$1.20



### 0.156" (4MM) LOCKING & POLARISING HEADER CONNECTORS

The contacts are rated at 250V @ 7A AC/DC which makes them an ideal power connector to a PCB. They are end to end stackable and commonly seen as the output connector on Switchmode power supplies.

TECHNICAL INFORMATION	ALL MODELS
Voltage	250V
Current	7.0A
Contact Resistance	20mΩ max
Dielectric Withstanding Voltage	1500V
Insulation Resistance	500k Ohm min
Contact Insertion Force	2.28kg
Contact Retention to Housing	4.56kg
Wire Pull-Out force	2.85kg
Mating Force	0.86kg
Unmating Force	150g
Durability	25 cycles
Housing	Nylon UL 94V-2
Temperature	-40 to 105°C



#### 0.156" (4MM) LOCKING & POLARISED, STRAIGHT ENTRY PIN PCB PLUG

(To match previous headers)

PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3442	\$0.30	\$0.25	\$0.24
3	HM-3443	\$0.35	\$0.30	\$0.27
4	HM-3444	\$0.40	\$0.35	\$0.30
6	HM-3446	\$0.60	\$0.52	\$0.47
8	HM-3448	\$0.80	\$0.70	\$0.62
10	HM-3450	\$0.90	\$0.80	\$0.70



## ▼ DISK DRIVE CONNECTORS

### DISK DRIVE POWER CONNECTOR - PLUG

Plug for wiring power to any standard drive. Has crimp pins.



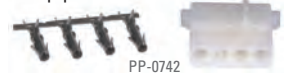
### DISK DRIVE PCB POWER PLUG

Power Plug to PC drives.



### DISK DRIVE POWER SOCKET

Socket for wiring power cables for use on any standard drive. Has crimp pins.



### DISK DRIVE IDC POWER SOCKET

- Insulation displacement type



TYPE	CAT.	Qty 1+	Qty 10	Qty 50
Power Plug	PP-0743	\$1.95	\$1.75	\$1.55
PCB Power Plug	PP-0744	\$1.45	\$1.30	\$1.15
Power Socket	PS-0742	\$2.95	\$2.60	\$2.30
IDC Power Socket	PS-0740	\$3.95	\$3.45	\$3.15

## ▼ SOLDER LUGS & TAGSTRIPS

### SOLDER LUGS

Solder lugs for any screw down connection.

- Length: 17.6mm
- ID#1: 4.3mm

- ID#2: 2.0mm
- Tin plated
- 10A rated



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
50	HP-1350	\$3.95	\$3.45	\$3.15

### TAGSTRIPS

- Tin plated lugs

HM-3308

Staked to phenolic

TYPE	CAT.	Qty 1+	Qty 4+	Qty 10
2 Way	HM-3302	\$0.65	\$0.59	\$0.52
3 Way	HM-3303	\$0.80	\$0.72	\$0.64
4 Way	HM-3304	\$0.95	\$0.86	\$0.76
5 Way	HM-3305	\$1.10	\$0.95	\$0.85
8 Way	HM-3308	\$1.50	\$1.35	\$1.20

### TAGBOARD

2 tagboards per pack with 8 tin plated lugs per side.

- Dimensions: 80(L) x 32(W)mm including lugs

Staked to phenolic

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3320	\$3.50	\$3.15	\$2.80

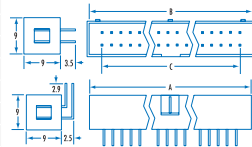
## ▼ IDC PLUGS, SOCKETS & PINS

### IDC HEADERS

All headers have gold plated pins.

#### VERTICAL

DIMENSIONS (MM)	PINS	A	B	C
Cat. PP-1100	10	20	18	10
Cat. PP-1106	16	28	26	18
Cat. PP-1110	26	41	38.5	30.5
Cat. PP-1112	34	51	49.5	41
Cat. PP-1114	40	58.5	56	48
Cat. PP-1116	50	71	69	61



PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
10	PP-1100	\$0.95	\$0.85	\$0.75
16	PP-1106	\$1.25	\$1.10	\$0.97
26	PP-1110	\$1.65	\$1.45	\$1.30
34	PP-1112	\$1.95	\$1.75	\$1.55
40	PP-1114	\$2.25	\$1.95	\$1.80
50	PP-1116	\$0.95		

#### RIGHT ANGLE

DIMENSIONS (MM)	PINS	A	B	C
Cat. PP-1118	10	20	18	10
Cat. PP-1122	16	28	26	18
Cat. PP-1126	26	41	38.5	30.5
Cat. PP-1128	34	51	49.5	41
Cat. PP-1132	50	71	69	61



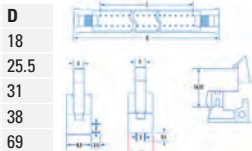
PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
10	PP-1118	\$1.25	\$1.10	\$0.97
16	PP-1122	\$1.45	\$1.30	\$1.15
26	PP-1126	\$1.75	\$1.55	\$1.40
34	PP-1128	\$2.25	\$1.95	\$1.80
50	PP-1132	\$2.95	\$2.60	\$2.30

### IDC LOCKING HEADERS

All headers have gold plated pins.

#### VERTICAL

DIMENSIONS (MM)	PINS	A	B	C	D
Cat. PP-1134	10	32	10	22	18
Cat. PP-1138	16	39.5	18	29.5	25.5
Cat. PP-1140	20	45	23	34.5	31
Cat. PP-1142	26	52	30.5	42	38
Cat. PP-1148	50	83	61	73	69



PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
10	PP-1134	\$1.25	\$1.10	\$0.97
16	PP-1138	\$1.65	\$1.45	\$1.30
20	PP-1140	\$1.95	\$1.75	\$1.55
26	PP-1142	\$2.25	\$1.95	\$1.80
50	PP-1148	\$3.75	\$3.30	\$2.95

#### RIGHT ANGLE

DIMENSIONS (MM)	PINS	A	B	C	D
Cat. PP-1150	10	32	10	22	18
Cat. PP-1154	16	39.5	18	29.5	25.5
Cat. PP-1164	50	83	61	73	69



PINS	CAT.	Qty 1+	Qty 4+	Qty 10+
10	PP-1150	\$1.45	\$1.30	\$1.15
16	PP-1154	\$1.75	\$1.55	\$1.40
50	PP-1164	\$0.95		

### TERMINAL AND CONNECTOR BARGAIN PACK - ASSORTED

Every good hobbyist or technician workshop needs a great collection of spare components and odds & ends. Replenish your own collection or kick start the collection of a young enthusiast with our bargain packs.

- Contains an assortment of over 60 different in-line and PCB mount connectors, and PCB mount terminals
- Contents worth over three times the price

Note: Pack contents may vary to the one shown.



CAT.	Qty 1+
XB-9005	\$14.95

### IDC LINE SOCKETS

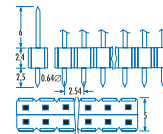
- Insulation displacement connection
- Suits standard pitch ribbon cable
- 3A rated



PINS	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 50+
10	3A	PS-0984	\$1.65	\$1.45	\$1.30
16	3A	PS-0985	\$1.85	\$1.65	\$1.45
20	3A	PS-0986	\$1.95	\$1.75	\$1.55
26	3A	PS-0987	\$2.25	\$1.95	\$1.80
34	3A	PS-0988	\$2.65	\$2.30	\$2.07
40	3A	PS-0989	\$2.95	\$2.60	\$2.30
50	3A	PS-0990	\$3.45	\$3.05	\$2.75

### DUAL IN-LINE JUMPERS

- 40 way (2 x 20)
- Snap apart
- 3A rated

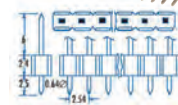


PINS	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
40	3A	HM-3250	\$1.75	\$1.55	\$1.40

### HEADER TERMINAL STRIPS 28 & 40 PIN

VERTICAL LAUNCHER - 0.1" / 2.54mm Pitch For PCBs and PCB mass terminals. Snap apart if you need a small length

- 3A rated



PINS	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
28	3A	HM-3211	\$0.85	\$0.75	\$0.65
40	3A	HM-3212	\$0.95	\$0.85	\$0.75

### 40 PIN FEMALE HEADER STRIP

Just like the headers on the Duinotech main boards & a great match for the HM-3212 40 pin male header strip. Trimming may be needed to use shorter lengths.

- 3A rated



PINS	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
40	3A	HM-3230	\$1.80	\$1.60	\$1.40

### 2 WAY CRIMP PLUG - 2.54MM - PKT 10

2 way plug commonly used on cordless phone batteries and RC toy Li-Po batteries.

Ratings: Current 3A / Voltage 250V AC/DC

Pitch: 2.54mm

Temperature Rating: -25°C to +85°C

Suitable wire size: 30-22AWG (0.25mm to 0.4mm)



TYPE	PACK	CAT.	Qty 1+	Qty 10+	Qty 50+
Crimp Plugs	10	PT-4453	\$2.95	\$2.65	\$2.35

### JUMPER SHUNTS

2.54mm spacing. Pkt 10

- 3A rated



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
10	HM-3240	\$1.85	\$1.65	\$1.45

### PCB PINS & SOCKETS

0.9mm pins and sockets for easy termination of wire on PCB boards.

- Gold flashed
- 5A rated



TYPE	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
Pins	50	HP-1250	\$4.50	\$3.95	\$3.60
Sockets	25	HP-1260	\$5.50	\$4.90	\$4.30

## ✓ HIGH CURRENT - GENERAL PURPOSE SINGLE CORE - BY THE METRE OR ROLL

### 15 AMP TINNED

Flexible DC tinned copper power cable suitable for general purpose automotive and marine applications.

RED: WH-3073

BLACK: WH-3075



SPECIFICATIONS	WH-3073 & WH-3075
Current Capacity	15A
Conductor mm2	1.84mm <sup>2</sup>
Conductor Material	Tinned Copper
AWG	15
Stranding	26 x 0.3mmTC
Insulation	PVC
Resistance (20°C)	0.0108 Ω/m
Wire Dia.	1.53mm
Overall Dia.	3.2mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3073	\$1.25	\$95.00	\$79.00
WH-3075	\$1.25	\$95.00	\$79.00

### 25 AMP TINNED

Ideal for most automotive wiring. Tinned for corrosion prevention in marine applications.

RED: WH-3080

BLACK: WH-3082



SPECIFICATIONS	WH-3080 & WH-3082
Current Capacity	25A
Conductor mm2	2.9mm <sup>2</sup>
Conductor Material	Tinned Copper
AWG	12
Stranding	41 x 0.3mmTC
Insulation	PVC
Resistance (20°C)	0.0059 Ω/m
Wire Dia.	1.99mm
Overall Dia.	4.5mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3080	\$2.55	\$225.00	\$189.00
WH-3082	\$2.55	\$225.00	\$189.00

### 56A 8 GAUGE OFC HIGH CURRENT

Good for all but the biggest car amplifiers etc.

RED: WH-3060

BLACK: WH-3062



SPECIFICATIONS	WH-3060 & WH-3062
Current Capacity	56A
Conductor mm2	8.31mm <sup>2</sup>
Conductor Material	OFC
AWG	8
Stranding	7 x 95/0.12mm
Insulation	PVC
Resistance (20°C)	0.00252 Ω/m
Wire Dia.	4.05mm
Overall Dia.	7.52mm
Roll Length	100m

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3060	\$4.15	\$365.00	\$309.00
WH-3062	\$4.15	\$365.00	\$309.00

### 110A 4 GAUGE OFC SUPER HIGH CURRENT

Run from your battery to distribution boxes and then the 8GA to amps etc.

RED: WH-3064

BLACK: WH-3066



SPECIFICATIONS	WH-3064 & WH-3066
Current Capacity	100A
Conductor mm2	10mm <sup>2</sup>
Conductor Material	OFC
AWG	4
Stranding	7 x 7 x 34/0.127mm
Insulation	PVC
Resistance (20°C)	0.00097 Ω/m
Wire Dia.	7.70mm
Overall Dia.	11.10mm
Roll Length	50m

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3064	\$9.95	\$439.00	\$375.00
WH-3066	\$9.95	\$439.00	\$375.00

### 150A 2 GAUGE OFC ULTRA HIGH CURRENT

Run from your car battery to distribution boxes and then 8GA or 4GA to amps, etc.

RED: WH-3070

BLACK: WH-3072



SPECIFICATIONS	WH-3070 & WH-3072
Current Capacity	150A
Conductor mm2	13.5mm <sup>2</sup>
Conductor Material	OFC
AWG	2
Stranding	145 x 19/0.12mm
Insulation	PVC
Resistance (20°C)	0.0007 Ω/m
Wire Dia.	9.6mm
Overall Dia.	12.0mm
Roll Length	30m

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3070	\$16.95	\$449.00	\$379.00
WH-3072	\$16.95	\$449.00	\$379.00

### 200A 0 GAUGE OFC ULTRA HIGH CURRENT

Run from your battery to distribution blocks and then 2GA, 4GA or 8GA to your amplifiers or other power equipment for seriously high current applications.

RED: WH-3092

BLACK: WH-3094



SPECIFICATIONS	WH-3092 & WH-3094
Current Capacity	200A
Conductor mm2	15.8mm <sup>2</sup>
Conductor Material	OFC
AWG	0
Stranding	7 x 7 x 81/0.12mm
Insulation	PVC
Resistance (20°C)	350 μΩ/m
Wire Dia.	12.2mm
Overall Dia.	15mm
Roll Length	25m

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3092	\$24.95	\$549.00	\$469.00
WH-3094	\$24.95	\$549.00	\$469.00

## ✓ HIGH CURRENT - GENERAL PURPOSE - HANDY PACKS

### 7.5 AMP TINNED - HANDY PACKS

Flexible heavy duty tinned copper cable suitable for general purpose wiring up to 250V supplied on an easy to use handy pack 10m reel. Suitable for use in marine.

RED: WH-3045 BLACK: WH-3046

GREEN: WH-3047



SPECIFICATIONS	ALL MODELS
Rated Current	7.5A
Conductor Dia.	0.97mm
Conductor mm2	0.75mm <sup>2</sup>
AWG	18/19
Stranding	24 x 0.2mmTC
Insulation	PVC
Resistance (20°C)	0.0237 ohm/m
Overall Dia.	2.4mm
Roll Length	10m

CAT.	1+ Roll	4+ Rolls	10+ Rolls
WH-3045	\$5.25	\$4.70	\$4.20
WH-3046	\$5.25	\$4.70	\$4.20
WH-3047	\$5.25	\$4.70	\$4.20

### 7.5 AMP TINNED - HEAVY DUTY SILICONE HANDY PACKS - 10M ROLLS

Silicone rubber insulation, very flexible with high temperature rating. Max temperature 180°C.

• Roll Length 10m

RED: WH-3035

BLACK: WH-3037



CAT.	1+ Roll	4+ Rolls	10+ Rolls
WH-3035	\$12.95	\$11.35	\$10.35
WH-3037	\$12.95	\$11.35	\$10.35

For light duty Hook-up cable see page 194.

What does "OFC" mean? It means OXYGEN FREE COPPER. It's a purer form of copper metal.

### 15 AMP TINNED - HANDY PACKS

Flexible DC tinned copper power cable suitable for general purpose automotive and marine applications. Supplied on an easy to use 10m handy pack reel and available in three colours.

• Tinned copper cable

RED: WH-3054

BLACK: WH-3055

GREEN: WH-3056



SPECIFICATIONS	ALL MODELS
Rated Current	15A
AWG	16
Stranding	26 x 0.3mm
Insulation	PVC
Maximum Temp.	80°C
Overall Dia.	3.3mm
Roll Length	10m

CAT.	1+ Roll	4+ Rolls	10+ Rolls
WH-3054	\$11.95	\$10.70	\$9.50
WH-3055	\$11.95	\$10.70	\$9.50
WH-3056	\$11.95	\$10.70	\$9.50



## ✓ HIGH CURRENT - GENERAL PURPOSE - 2 CORE

	RATED CURRENT	CONDUCTOR DIA	CONDUCTOR MM2	STRANDING	AWG	ROLL LENGTH
<b>WH-3057 / 49 / 53</b>	7.5A	1.9mm	0.75mm <sup>2</sup> x 2	24 x 0.2mm <sup>2</sup>	18	100m / 10m / 30m
<b>WH-3079 / 77</b>	15A	1.45mm x 2	1.5mm <sup>2</sup> x 2	(48 x 0.2mm <sup>2</sup> ) x 2	16	100m / 30m
<b>WH-3087</b>	25A	3.3mm x 2	2.90mm <sup>2</sup>	41/0.30mm (per conductor)	12	100m
<b>WH-3063</b>	56A	3.2mm x 2	8mm <sup>2</sup> x 2	(7 x 101 x 0.12mm <sup>2</sup> ) x 2	8	50m
<b>WH-3067</b>	90A	4.11mm x 2	13.3mm <sup>2</sup> x 2	(7 x 7 X 24 x 0.12mm <sup>2</sup> ) x 2	6	50m

### 7.5 AMP 2 CORE TINNED DC POWER CABLE

Double insulated 2 core power cable suitable for auto & boating applications. Tinned copper cable suitable for use in marine applications. Sold by the metre or 10m handy pack or 30m roll pack. PVC Insulation.

- Resistance (20°C): 0.024 ohm/m
- Max Temp.: 80°C
- Dimensions: 5(W) x 3.2(H)mm

- WH-3057**
- 100m Roll
- WH-3049**
- 10m Roll
- WH-3053**
- 30m Roll

Sold by the metre or by the roll.

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3057	\$1.40	\$109.00	\$89.00
1+ Roll	4+ Rolls	10+ Rolls	
WH-3049	\$12.95	\$11.35	\$10.35
WH-3053	\$35.95	\$31.95	\$27.95

### 15 AMP TINNED

Double insulated 2 core tinned power cable suitable for automotive and marine applications (PVC + 48 x 0.2mm<sup>2</sup>) x 2. WH-3077 is 30m roll pack of WH-3079. PVC Insulation.

- Resistance (20°C): 0.0123 ohm/m
- Max Temp.: 80°C
- Dimensions: 4.5 x 7.2mm

- WH-3079**
- 100m Roll, sold by the metre or roll
- WH-3077**
- 30m Roll, sold by the roll only

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3079	\$2.50	\$185.00	\$159.00
1+ Roll	4+ Rolls	10+ Rolls	
WH-3077	\$69.95	\$62.95	\$55.95

### 25 AMP FIGURE-8 TINNED - BY THE METRE

Ideal for most auto, marine, or general purpose wiring. Twin core for positive and negative connections. Tinned copper conductors. PVC Insulation.

- Resistance (20°C): 0.0053 ohm/m
- Max Temp.: 80°C
- 3.5mm (outside dia)

WH-3087

 100m roll.

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3087	\$4.35	\$389.00	\$349.00

### 56 AMP FIGURE-8 TINNED - BY THE METRE

For higher current applications where twin core cabling is required. Red & black colour for easy identification. PVC Insulation.

- Resistance (20°C): 0.0024 ohm/m
- Max Temp.: 80°C
- Dimensions: 6.7 x 13.6mm

WH-3063

 50m roll.

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3063	\$8.20	\$359.00	\$309.00

### 90 AMP FIGURE-8 TINNED - BY THE METRE

For even higher current applications where twin core cabling is required. Red & black colour for easy identification. PVC Insulation.

- Resistance (20°C): 0.0013 ohm/m
- Max Temp.: 80°C
- Dimensions: 8.5 x 17.0mm

WH-3067

 50m roll.

CAT.	Per Metre	1+ Roll	5+ Rolls
WH-3067	\$12.95	\$559.00	\$479.00

## ✓ SOLAR SYSTEM CABLE

### UV STABILISED SOLAR POWER CABLE - 100 METRE CABLE

Very tough cable, specifically for the rigors of outdoor use in solar panel installations. Dust, age and UV resistant, tinned copper conductors to minimize corrosion. Use with our PV connectors for complete environmental protection.

### TÜV CERTIFIED

Sold by the metre or by the roll. WH-3121

WH-3122

SPECIFICATIONS	WH-3121	WH-3122
<b>Rated Current</b>	58A	76A
<b>Conductor Area</b>	4.0mm <sup>2</sup>	6.0mm <sup>2</sup>
<b>Conductor Material</b>	Tin plate copper, Class 5	
<b>Rated Voltage</b>	1000VDC	
<b>Temp Range</b>	-40 - +125°C	
<b>Ingress Protection</b>	IP65	
<b>Insulation Material</b>	XLPC	
<b>TUV Certification</b>	2 PfG 1161/01.06	
<b>Roll Length</b>	100m	

CAT.	PER METRE	1+ ROLL	5+ ROLLS
WH-3121	\$4.95	\$435.00	\$369.00
WH-3122	\$7.95	\$699.00	\$595.00

See page 407 for Solar Connectors.

### Where's My Local Jaycar Store?:

Use our store finder on our website. With over 300 Jaycar Store and Stockists just type in your postcode or area to find the closest one to you.

## ✓ AC MAINS CABLE

### TWO CORE MAINS FLEX

Two-core mains flex cable (no earth) with a white outer PVC jacket. Suitable for general 240V appliances not requiring an earth.

CAT. WB-1560

### THREE CORE MAINS FLEX

Standard 240V 3 core mains flex power cable with a white outer PVC jacket. Suitable for extension cables and general 240V appliances where an earth is required.

CAT. WB-1562

### TWIN & EARTH WIRING - LIGHTING

Twin & Earth Flat Cable 1.00mm<sup>2</sup> x 2+E (Lights 10A)

CAT. WB-1565

### TWIN & EARTH WIRING - POWER

Twin & Earth Flat Cable 2.5mm<sup>2</sup> x 2+E (Power 20A)

CAT. WB-1568

SPECIFICATIONS	WB-1560	WB-1562	WB-1565	WB-1568
<b>Rated Current</b>	7.5A	10A	10A (Lights)	20A
<b>Type</b>	Round		Flat	
<b>Stranding</b>	24 / 0.2	32 / 0.1	1 / 1.13mm	7 / 0.67
<b>Approval No.</b>	Q070451	Q080451		
<b>Roll Length</b>	100m			

CONDUCTOR AREA	CAT.	Per Metre	1+ Roll	5+ Rolls
0.75mm <sup>2</sup> x 2	WB-1560	\$1.25	\$99.00	\$80.00
1.0mm <sup>2</sup> x 3	WB-1562	\$2.85	\$229.00	\$185.00
1.0mm <sup>2</sup> x 2 + Earth	WB-1565	\$1.55	\$125.00	\$100.00
2.5mm <sup>2</sup> x 2 + Earth	WB-1568	\$2.50	\$199.00	\$162.00

## GENERAL PURPOSE POWER

### FLEXIBLE LIGHT DUTY

13 x 0.12mm. Suited for all general purpose wiring. 8 different colours available. PVC

Rated Current	0.6A	Red	WH-3010
Conductor Dia.	0.42mm	Black	WH-3011
Conductor	0.147mm <sup>2</sup>	Brown	WH-3012
Stranding	13 x 0.12mmTC	Orange	WH-3013
Overall Dia.	1.8mm	Yellow	WH-3014
AWG	25	Green	WH-3015
Roll Length	100m	Blue	WH-3016
		White	WH-3017

Sold by the metre or by the roll.

	Per Metre	1+ Roll	5+ Rolls
All Types	\$0.25	\$15.00	\$12.00

### HEAVY DUTY

24 x 0.2mm. Suitable for 250V wiring and general heavy duty work. PVC insulation.

Rated Current	7.5A	Red	WH-3040
Conductor Dia.	0.97mm	Black	WH-3041
Conductor	0.75mm <sup>2</sup>	Green	WH-3042
Stranding	24 x 0.2mm		
Overall Dia.	2.4mm		
AWG	18/19		
Roll Length	100m		

Sold by the metre or by the roll.

	Per Metre	1+ Roll	5+ Rolls
All Types	\$0.55	\$42.00	\$35.00

### EXTRA HEAVY DUTY

32 x 0.2mm. Suitable for 250V wiring and general heavy duty work. PVC insulation.

Rated Current	10A	Brown	WH-3050
Conductor Dia.	1.15mm	Blue	WH-3052
Conductor	1mm <sup>2</sup>		
Stranding	32 x 0.2mm		
Overall Dia.	2.8mm		
AWG	17		
Roll Length	100m		

Sold by the metre or by the roll.

	Per Metre	1+ Roll	5+ Rolls
All Types	\$0.80	\$72.00	\$64.00

## HOOK-UP CABLE

### FLEXIBLE LIGHT DUTY - 25 METRE

Quality 13 x 0.12mm tinned hook-up wire on plastic spools.

Current rating	0.6A	Red	WH-3000
Insulation	PVC	Black	WH-3001
Resistance (20°C)	0.1365 Ω/m	Brown	WH-3002
Max temp.	70°C	Orange	WH-3003
AWG	26	Yellow	WH-3004
Roll Length	25m	Green	WH-3005
		Blue	WH-3006
		White	WH-3007

	1+ Roll	4+ Rolls	10+ Rolls
Sold Per Roll	\$5.50	\$4.90	\$4.30



### FLEXIBLE LIGHT DUTY REEL PACKS OF 8 - 25 METRES

Quality 13 x 0.12mm tinned hook-up wire on plastic spools.

Current Rating	0.6A	Max temp.	70°C
Insulation	PVC	AWG	26
Stranding	13 x 0.12mmTC	Overall Dia.	1.8mm
Resistance (20°C)	0.1365 ohm/m	Roll Length	25m

CAT.	1+ Roll	4+ Rolls	10+ Rolls
WH-3009	\$34.95	\$31.45	\$28.50

### HOOK UP CABLE PACKS

#### 2 METRE LENGTHS

2 metres of 8 different colours of 10 x 0.12mm hook-up cable. Total of 16m of cable.

CAT.	Qty 1+	Qty 5+	Qty 10+
WH-3025	\$4.95	\$4.45	\$3.90



## TRAILER CABLE - 10M ROLL

### TRAILER CABLE - 10 METRE ROLL

A 10 metre length of standard tinned 5 or 7 conductors sheathed in a tough black PVC jacket.



SPECIFICATIONS	WH-3091	WH-3090
Conductor Current	5A	
Cores	5	7
Total Diameter	6.3mm	8.2mm
Roll Length	10m	

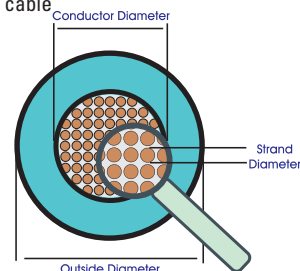
CAT.	1+ Roll	4+ Rolls	10+ Rolls
WH-3091	\$39.95	\$35.15	\$29.95
WH-3090	\$44.95	\$39.55	\$33.70

## Tech Talk: Wire & Cable

### Conductors vs Strands

Diameter of wire and cable in this catalogue is expressed by the number of strands x strand diameter.

Eg. 13 x 0.12 reads as 13 strands of 0.12 diameter cable



## SPECIAL APPLICATION

### ENAMELLED COPPER WIRE

This soft copper wire is coated in a high dielectric strength varnish. You can solder through the enamel, but we recommend that you lightly sandpaper the wire ends with 200+ grit paper to ensure good solder adhesion, especially with RoHS type solder.

MM	B&S	WGHT	AWG	APPROX LM	CAT.	1+ Roll	4+ Rolls	10+ Rolls
0.25	30	25g	33	58	WW-4012	\$6.95	\$6.25	\$5.50
0.315	28	25g	31	40	WW-4013	\$6.95	\$6.25	\$5.50
0.4	26	25g	28	22	WW-4014	\$6.95	\$6.25	\$5.50
0.5	24	100g	25	57	WW-4016	\$11.95	\$10.75	\$9.55
0.63	22	100g	23	36	WW-4018	\$12.95	\$11.35	\$10.35
0.8	20	100g	21	22	WW-4020	\$12.95	\$11.35	\$10.35
1.0	18	100g	19	14	WW-4022	\$10.95	\$9.75	\$8.75
1.25	16	100g	18	9	WW-4024	\$11.95	\$10.75	\$9.55

### WIRE WRAP ON SPOOLS - 30 METRES

This Kynar wire is high quality silver plated.

- Available in three colours
- Supplied on a 30 metre reel



ROLL LENGTH	COLOUR	CAT.	Qty 1+	Qty 4+	Qty 10+
30m	Red	WW-4344	\$15.95	\$14.35	\$12.70
30m	Black	WW-4345	\$15.95	\$14.35	\$12.70
30m	Blue	WW-4346	\$15.95	\$14.35	\$12.70

### TINNED COPPER WIRE

Two handy sizes of AWG 22 (0.71mm dia.) for wire links etc.



WEIGHT	CAT.	1+ Roll	4+ Rolls	10+ Rolls
25g	WW-4032	\$12.95	\$11.35	\$10.35
100g	WW-4030	\$29.95	\$26.90	\$23.70

### NICHROME RESISTANCE WIRE - 4 METRES

Used for wiring heating elements such as toasters, etc.

- 80% nickel, 20% chromium.
- Resistance 13.77 ohm per metre.
- Size 28 B&S (0.315mm)
- 4m



LENGTH 4 METRES.

CAT.	Qty 1+	Qty 4+	Qty 10+
WW-4040	\$4.95	\$4.45	\$3.90



## ✓ TERMINAL BLOCKS & CONNECTORS

### WAGO PUSH WIRE CONNECTORS

WAGO 273 Series PUSH WIRE® connector for use in junction boxes suitable for solid conductors. This reliable connector with PUSH WIRE® technology has proven itself as an immediate solution for use with cross-sections up to 4mm². The transparent housing enables the installer to see at a glance whether all the conductors have been fully inserted & properly connected. 10A rated



SIZE	COLOUR	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	Yellow	HM-3231	\$0.75	\$0.68	\$0.60
3 Way	Red	HM-3232	\$0.90	\$0.81	\$0.72
4 Way	Orange	HM-3233	\$1.65	\$1.45	\$1.30

### WAGO SPICE TERMINAL BLOCKS

Connect different types of conductors and bridge large differences in cross section with ease! In practical use, this connector can be used for intercom wiring, or to hook-up of an electric stove - fast. 10A rated.



TYPE	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	10A	HM-3234	\$1.20	\$1.05	\$0.95
3 Way	10A	HM-3235	\$1.25	\$1.10	\$1.00

### CARRIER FOR SPICE TERMINAL BLOCKS

An orange mounting carrier suitable for HM-3234 (2 wire) and HM-3235 (3 wire) compact splicing connectors.



CAT.	Qty 1+	Qty 4+	Qty 10+
HM-3236	\$1.95	\$1.75	\$1.55

### 3-WAY PLUG-IN SPRING TERMINAL BLOCK

Easy-to-use, push-wire terminal block that make joining wires a breeze. No tools necessary! Simply insert the stranded or solid wire and it will bite down to hold the wire in place. Rated for high voltage applications but would also suit lower voltage applications like 12V lighting. 240V rated



	CAT.	Qty 1+	Qty 4+	Qty 10+
Pack of 2	HM-3190	\$1.95	\$1.75	\$1.55

### "JOW" CABLE CLAMP CONNECTORS

Simply insert your wire into the clamp opening and snap it shut using your hands or small pliers depending on wire gauge to make the connection. The precision-sharpened connector blades borrows the IDC configuration that cut through the wires create a connection. Available in two shapes - "I" type and "T" type. "I" type are used for end to end connections whereas the "T" type for parallel connections. Ideal for applications such as: low voltage LEDs, residential, automotive, communication and broadcasting.



- Avoid stripping, twisting or crimping cables together eliminates need to tape cables
- Creates an IP33 connection
- Electrically Safety approved
- Handles up to 600VAC
- RoHS compliant



SPECIFICATIONS	PT-4640	PT-4641
Suitable For Cable Between	27-20 (AWG) Cross section (mm2): 0.2-0.5	19-17 (AWG) Cross section (mm2): 0.75
Max Current (240VAC)	3A	10A
Connection Loss (Ohm)	0.0018	0.0010
Dimensions/Weight	25(L) x 5.5(W) x 5.5(H) mm/0.8g	30(L) x 6(W) x 6(H)mm/1g
Suitable For Cable Between	PT-4651 19-17 (AWG), Cross section (mm2): 0.75	PT-4653 3-12 (AWG), Cross section (mm2): 2.5
Max Current (240VAC)	10A	20A
Connection Loss (Ohm)	0.0010	0.0001
Dimensions/Weight	30(L) x 6(W) x 6(H)mm/1.6g	37(L) x 7.7(W) x 7.7(H) mm/3.3g

TYPE	CURRENT	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
In-line I Type	3A	6	PT-4640	\$6.95	\$6.25	\$5.55
In-line I Type	10A	4	PT-4641	\$5.95	\$5.35	\$4.75
Parallel T Type	10A	4	PT-4651	\$6.95	\$6.25	\$5.55
Parallel T Type	20A	2	PT-4653	\$6.95	\$6.25	\$5.55

### CERAMIC TERMINAL BLOCKS

Glazed porcelain terminal blocks are ideal for high temperature situations, such as in lighting. Ask us for competitive bulk prices.



TYPE	CURRENT	VOLTAGE	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Wire Medium	10A	250VAC	HM-3182	\$0.85	\$0.75	\$0.65
3 Wire Small	5A	380VAC	HM-3183	\$1.10	\$1.00	\$0.90
3 Wire Large	30A	250VAC	HM-3185	\$1.50	\$1.35	\$1.20

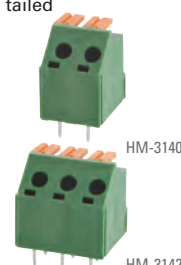
## ✓ HEADER/ TERMINAL BLOCKS - PCB MOUNT

### PCB SPRING TERMINAL BLOCKS

These PCB terminal blocks retain the wire securely by a spring type clamp. The wire is held very securely but can be quickly released by depressing a release lever. The wire can be inserted/released indefinitely with virtually no deterioration of the contact/spring assembly. Both 2 & 3 poles are available and the housing of each is dove tailed to stack together and make any number of poles.

- Pitch: 5.0mm
- Housing material: PA66
- Contact/spring assembly: Stainless Steel
- Will accept wires from 22-14AWG

SPECIFICATIONS	BOTH
Current Rating	12.0A @ 300VAC
Temperature Rating	-40 to +105°C
Power Rating	5kV rated / 250VAC Cat III
Dimensions	2-Way: 10(L) x 13(W) x 15(H)mm 3-Way: 15(L) x 13(W) x 15(H)mm

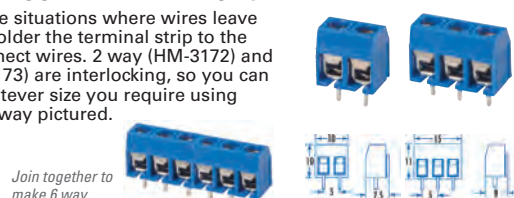


TYPE	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	12A	HM-3140	\$2.20	\$1.95	\$1.75
3 Way	12A	HM-3142	\$2.90	\$2.60	\$2.30

### PCB MOUNT SCREW TERMINALS - 5MM

Ideal for those situations where wires leave a PCB. Just solder the terminal strip to the PCB and connect wires. 2 way (HM-3172) and 3 way (HM-3173) are interlocking, so you can make up whatever size you require using these - see 6 way pictured.

- 8A rated



TYPE	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	8A	HM-3172	\$1.20	\$1.05	\$0.95
3 Way	8A	HM-3173	\$1.55	\$1.35	\$1.20

### WEIDMULLER PCB MOUNT SCREW TERMINALS - 5.08MM

These are 5.08mm spacing, come in 2 & 3 way, are interlocking & orange in colour.

- 10A rated



TYPE	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	10A	HM-3130	\$1.20	\$1.05	\$0.95
3 Way	10A	HM-3132	\$1.55	\$1.35	\$1.20

### LED STRIP CONNECTORS

Handy 2 pin joiners and power leads to make installing your LED strips neater an easier. Joiners available in straight, elbow & T-shape.



TYPE	CAT.	Qty 1+	Qty 5+	Qty 10+
2 Pin Joiner (4 Pack)	ZD-0644	\$4.95	\$4.45	\$3.95
2 Pin Joiner Elbow (2 Pack)	ZD-0646	\$3.95	\$3.55	\$3.15
2 Pin Joiner T-Shape	ZD-0648	\$4.95	\$4.45	\$3.95
2 Pin to 2.1mm DC Socket	ZD-0640	\$6.95	\$6.25	\$5.55
2 Pin to Bare Leads	ZD-0642	\$2.95	\$2.65	\$2.35



## ✓ HEADERS/ TERMINAL BLOCKS - PCB MOUNT (CONTINUED)

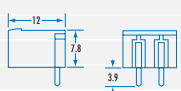
### 5.08MM HIGH QUALITY PLUGGABLE TERMINAL BLOCKS/HEADERS

Available in both horizontal-plug and vertical-plug versions, these quality headers simply solder to a PC board and are for the Pluggable Terminal Blocks (see below).

- Made from Polyamide66 plastic (UL94V-0)
- 1.0mm tin-plated brass solder pins
- Excellent current and insulation characteristics



SPECIFICATIONS	ALL MODELS
Current Rating	12.0A @ 300VAC
Insulation Withstands Volt	2000VAC min
Insulation Resistance	>5000MΩ 500VDC
Pcb Hole Diameter	1.5mm
Pitch	5.08mm (0.200 inch)



The plug version to suit the above headers - these terminal blocks are easily plugged in, and feature nickel-plated brass cage clamps, tin-plated phosphor bronze contacts, M3 nickel-plated steel screws.

#### HORIZONTAL PC MOUNT (PIC A)

POLES	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3102	\$0.95	\$0.85	\$0.75
3	HM-3103	\$1.65	\$1.45	\$1.30
4	HM-3104	\$1.95	\$1.75	\$1.55
6	HM-3106	\$2.95	\$2.60	\$2.30
8	HM-3108	\$3.95	\$3.45	\$3.15

#### VERTICAL PM MOUNT PLUGGABLE HEADERS (PIC B)

POLES	CAT.	Qty 1+	Qty 4+	Qty 10+
2	HM-3112	\$0.95	\$0.85	\$0.75
3	HM-3113	\$1.65	\$1.45	\$1.30
4	HM-3114	\$1.95	\$1.75	\$1.55
6	HM-3116	\$2.95	\$2.60	\$2.30
8	HM-3118	\$3.95	\$3.45	\$3.15

#### SCREW TERMINAL SOCKETS (PIC C)

POLES	WIDTH (MM)	CAT.	Qty 1+	Qty 4+	Qty 10+
2	11.40	HM-3122	\$2.35	\$1.95	\$1.85
3	16.40	HM-3123	\$3.60	\$3.15	\$2.75
4	21.40	HM-3124	\$4.95	\$4.45	\$3.90
6	31.40	HM-3126	\$6.95	\$6.25	\$5.50
8	41.40	HM-3128	\$9.95	\$8.95	\$7.95

## ✓ TERMINAL BARRIERS

### SURFACE MOUNT SCREW TERMINAL STRIPS

These units feature the ability to terminate 2 or 3 sets of wires securely with the option of changing or adding connections. In classic barrier strip fashion there is a comprehensive fence between each terminal. Each sturdy block has 2 x 4mm mounting holes at each end and an insulating body with high impact plastic. Two models available.

- 25A rated



TYPE	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	25A	HM-3167	\$2.95	\$2.60	\$2.30
3 Way	25A	HM-3169	\$3.45	\$3.05	\$2.75

### PLUG/SOCKET TERMINAL STRIP

Semi permanent connection up to 12 poles.

- Reliable screw down termination
- 10A per pole
- Supplied as a matching pair



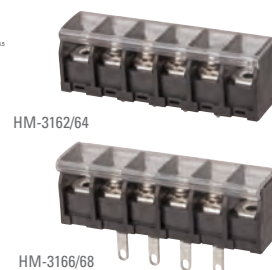
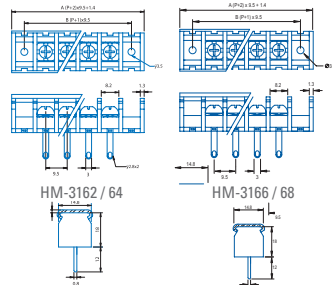
CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
10A	HM-3202	\$12.95	\$11.35	\$10.35

## TERMINAL BARRIERS - TRANSPARENT COVERS

SPECIFICATIONS	ALL MODELS
Pitch	9.5mm
Barrier Material	Thermoplastic (UL-94V-0), Black
Terminals	Tin Plated Brass (Standard)
Screws	Nickel Plated Steel
Wire AWG	12-22 STR
Rating	25 Amp, 300VAC
Cover Material	PC
Insulation Withstands Voltage	AC 2000V/Min
Insulation Resistance	500Mohm or more at 500V

#### PC MOUNT

TYPE	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	25A	HM-3162	\$3.95	\$3.45	\$3.15
6 Way	25A	HM-3164	\$5.50	\$4.90	\$4.30



#### PANEL MOUNT

TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	HM-3166	\$3.95	\$3.45	\$3.15
6 Way	HM-3168	\$5.50	\$4.90	\$4.30

## TERMINAL STRIPS

Still 12 way and capable of being divided with a sharp knife, however, the screw retention is much sturdier. Each terminal block has a mounting hole on a fixed pitch.

- Material: Polyamide 66 (nylon) / UL94V-2 flame retardant
- Temperature: -35°C to 110°C
- Voltage: 250-450V
- Colour: Natural



CURRENT	CABLE DIA	LENGTH	PITCH	CAT.	Qty 1+	Qty 4+	Qty 10+
6A	3.3mm	114.5mm	10mm	HM-3194	\$1.75	\$1.55	\$1.40
10A	4.2mm	128.8mm	11mm	HM-3196	\$1.95	\$1.75	\$1.55
15A	4.5mm	136.8mm	12mm	HM-3200	\$2.65	\$2.30	\$2.07

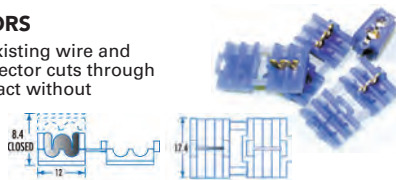
CURRENT	CABLE DIA	LENGTH	PITCH	CAT.	Qty 1+	Qty 4+	Qty 10+
30A	5.6mm	164.5mm	15mm	HM-3198	\$2.85	\$2.53	\$2.23
60A	6.6mm	193mm	16.3mm	HM-3204	\$4.95	\$4.45	\$3.90

## ✓ CONTACT & QUICK SPLICE CONNECTORS

### CONTACT CONNECTORS

Simply wrap around the existing wire and new wire & squeeze. Connector cuts through insulation and makes contact without damaging the conductor. Fully insulated once on.

- 5A rated



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
4	HP-1206	\$1.95	\$1.75	\$1.55

### QUICK SPLICE CONNECTORS

Simply insert your wires and squeeze it closed to connect and crimp. Quick, easy, and secure. Nylon insulation rated to 105°C

- 5A rated



ID	TYPE	PK	CAT.	Qty 1+	Qty 4+	Qty 10+
A	22-18AWG	6	PT-4537	\$2.75	\$2.45	\$2.15
B	16-14AWG	6	PT-4637	\$2.75	\$2.45	\$2.15
C	12-10AWG	6	PT-4737	\$2.75	\$2.45	\$2.15



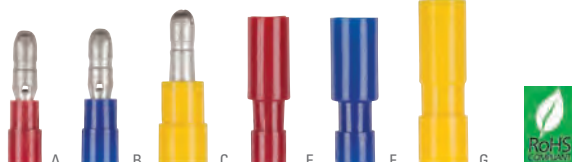
## STANDARD QUICK CONNECTORS

### NYLON INJECTION MOULDING

Unlike the majority of quick crimp connectors available on the market, our range of standard quick connectors are made with a nylon injection moulded insulation as opposed to the heat shrunk vinyl insulation most others feature. The injection-moulded nylon insulation is temperature rated to 105°C, and features a moulded funnel taper in the insulation for easy cable entry. MOST BULLET, SPADE LUG & FORK CONNECTORS CAN BE SAFELY RATED FOR 10 AMPS.

#### BULLETS

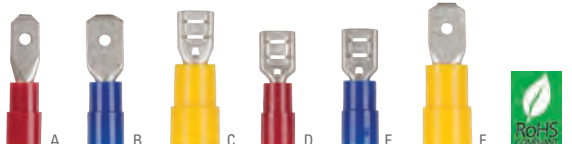
- Red: Cable entry size 4.3mm  
Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm  
Wire size 1.5 - 2.5mm dia
- Yellow: Cable entry size 6.6mm  
Wire size 4 - 6mm dia



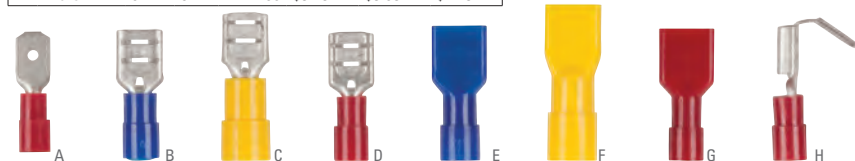
ID	TYPE	SIZE	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+
A	Male	4	8	PT-4500	\$3.50	\$3.15	\$2.75	50	PT-4501	\$9.95	\$8.75	\$7.75
B	Male	4	8	PT-4600	\$3.50	\$3.15	\$2.75	100	PT-4601	\$15.95	\$14.35	\$12.70
C	Male	4	8	PT-4700	\$3.75	\$3.30	\$2.95	100	PT-4701	\$18.95	\$16.95	\$14.95
D	Female	4	8	PT-4502	\$3.50	\$3.15	\$2.75	50	PT-4503	\$9.95	\$8.75	\$7.75
E	Female	4	8	PT-4602	\$3.50	\$3.15	\$2.75	100	PT-4603	\$15.95	\$14.35	\$12.70
F	Female	4	8	PT-4702	\$3.75	\$3.30	\$2.95	100	PT-4703	\$18.95	\$16.95	\$14.95

#### SPADES

- Red: Cable entry size 4.3mm  
Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm  
Wire size 1.5 - 2.5mm dia
- Yellow: Cable entry size 6.6mm  
Wire size 4 - 6mm dia



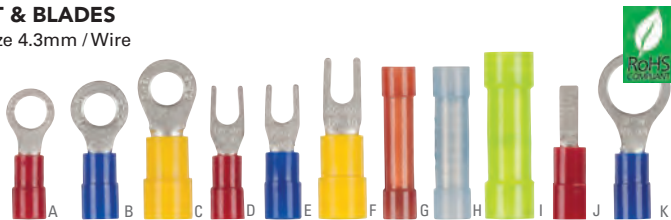
ID	TYPE	SIZE	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+
A	Male	4.8	8	PT-4518	\$2.75	\$2.45	\$2.15	100	PT-4610	\$14.95	\$13.35	\$11.70
B	Male	6.3	8	PT-4609	\$2.75	\$2.45	\$2.15	100	PT-4721	\$17.95	\$15.95	\$14.35
C	Female	4.8	8	PT-4722	\$3.45	\$3.05	\$2.75	50	PT-4524	\$13.95	\$12.35	\$10.95
D	Female	4.8	8	PT-4522	\$2.75	\$2.45	\$2.15	100	PT-4621	\$14.95	\$13.35	\$11.70
E	Female	4.8	8	PT-4622	\$2.75	\$2.45	\$2.15	100	PT-4710	\$17.95	\$15.95	\$14.35
F	Male	6.4	8	PT-4709	\$3.45	\$3.05	\$2.75					



ID	TYPE	SIZE	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+
A	Male	6.4	8	PT-4509	\$2.75	\$2.45	\$2.15	100	PT-4512	\$13.95	\$12.35	\$10.95
B	Female	6.4	8	PT-4607	\$2.75	\$2.45	\$2.15	100	PT-4608	\$15.95	\$14.35	\$12.70
C	Female	6.8	8	PT-4707	\$2.75	\$2.45	\$2.15	100	PT-4708	\$18.95	\$16.95	\$14.95
D	Female	6.8	8	PT-4507	\$2.75	\$2.45	\$2.15	100	PT-4513	\$13.95	\$12.35	\$10.95
E	Female	6.4	8	PT-4625	\$2.95	\$2.60	\$2.30	50	PT-4626	\$9.95	\$8.75	\$7.75
F	Female	6.8	8	PT-4725	\$3.75	\$3.30	\$2.95	50	PT-4726	\$12.95	\$11.35	\$10.35
G	Female	6.8	8	PT-4525	\$2.75	\$2.45	\$2.15	50	PT-4526	\$9.95	\$8.75	\$7.75
H	Piggyback	6.4	8	PT-4510	\$2.75	\$2.45	\$2.15	100	PT-4511	\$13.95	\$12.35	\$10.95

#### EYE, FORK, BUTT & BLADES

- Red: Cable entry size 4.3mm / Wire size 0.75 - 1mm dia
- Blue: Cable entry size 4.5mm / Wire size 1.5 - 2.5mm dia
- Yellow: Cable entry size 6.6mm / Wire size 4 - 6mm dia



ID	TYPE	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+	PKT	CAT.	Qty 1+	Qty 4+	Qty 10+
A	Eye	8	PT-4514	\$2.75	\$2.45	\$2.15	100	PT-4515	\$13.95	\$12.35	\$10.95
B	Eye	8	PT-4614	\$2.75	\$2.45	\$2.15	100	PT-4615	\$14.95	\$13.35	\$11.70
C	Eye	8	PT-4714	\$3.75	\$3.30	\$2.95	100	PT-4715	\$17.95	\$15.95	\$14.35
D	Fork	8	PT-4523	\$2.75	\$2.45	\$2.15	100	PT-4529	\$13.95	\$12.35	\$10.95
E	Fork	8	PT-4623	\$2.75	\$2.45	\$2.15	100	PT-4624	\$14.95	\$13.35	\$11.70
F	Fork	8	PT-4723	\$3.75	\$3.30	\$2.95	100	PT-4724	\$17.95	\$15.95	\$14.35
G	Butt	8	PT-4527	\$2.75	\$2.45	\$2.15	100	PT-4528	\$13.95	\$12.35	\$10.95
H	Butt	8	PT-4627	\$2.75	\$2.45	\$2.15	100	PT-4628	\$14.95	\$13.35	\$11.70
I	Butt	8	PT-4727	\$3.75	\$3.30	\$2.95	100	PT-4728	\$17.95	\$15.95	\$14.35
J	Blade	8	PT-4516	\$2.75	\$2.45	\$2.15	100	PT-4517	\$13.95	\$12.35	\$10.95
K	Eye	8	PT-4618	\$2.75	\$2.45	\$2.15	8	PT-4718	\$3.75	\$3.30	\$2.95

### LARGE SPADE QUICK CONNECTORS

- Spade socket
  - 9.5mm
  - Pack of 4
- Suits 60A horn relay SY-4074



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
4	PT-4717	\$3.95	\$3.45	\$3.15

### FERRULE CRIMP CONNECTORS

- Pack of 20



ID	SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
A	0.75mm <sup>2</sup>	PT-4433	\$2.95	\$2.60	\$2.30
B	1.50mm <sup>2</sup>	PT-4533	\$2.95	\$2.60	\$2.30
C	2.5mm <sup>2</sup>	PT-4633	\$2.95	\$2.60	\$2.30

### QUICK CONNECT PACK

A box of all the standard 1/4" (6.35mm) QC tabs and receptacles, but also the odd QC sizes ie: 3.3mm and 4.8mm sizes. Total 160 pieces.



Includes the following:

- 10 x 6.4mm female crimp spade lugs wire dia 1.8mm
- 10 x 6.4mm female crimp spade lugs wire dia 3.5mm
- 10 x Close end wire crimpers - dia 2.6mm
- 10 x Close end wire crimpers - dia 3.8mm
- 5 x Contact wire connectors
- 10 x Female bullet connectors - insulated
- 10 x Male bullet connectors - insulated
- 5 x 3 way spade lug connectors 6.8mm
- 5 x spade piggyback connectors 6.8mm
- 10 x 4.9mm female spade lugs
- 10 x 8.4mm hole dia ring terminals
- 10 x 5.7mm hole dia ring terminals
- 10 x 5.3mm hole dia spade terminals
- 10 x 4.3mm hole dia spade terminals
- 5 x 3.5mm dia butt connectors
- 5 x 2.3mm dia butt connectors
- 5 x 1.8mm dia butt connectors
- 10 x 3.3mm spade connectors (tweeter connectors)
- Beware of others with less than 160 pieces

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
160 Pieces	PT-4530	\$22.95	\$20.35	\$18.35

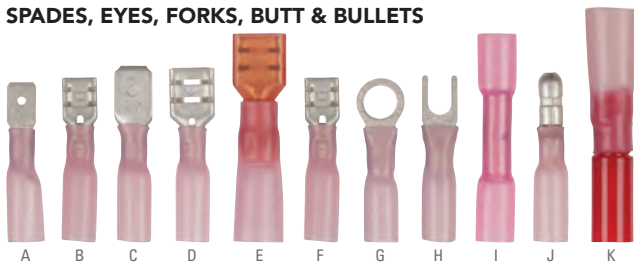
## Attention Educators! Can we Help?

If you're a parent or teacher and would like some practical resources or help, then your local Jaycar Store or Stockist can assist you with a wide range of learning projects for all ages.

## SELF SEALING QUICK CONNECTORS

The unique heat sensitive sealing gel in these quick connectors will automatically flood the crimp joint with sealant as the heat-shrink sleeve is heated. The resulting crimp connection is water and corrosion resistant and has good strain relief properties. 11 styles to choose from.

### SPADES, EYES, FORKS, BUTT & BULLETS



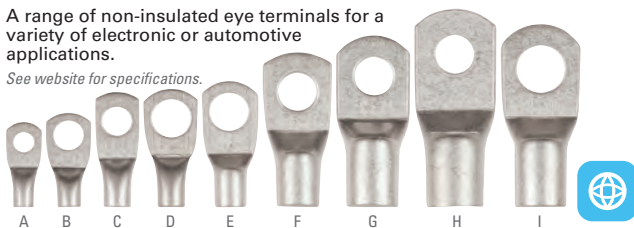
ID	TYPE	SIZE	CURRENT (DC)	CAT.	Qty 1+	Qty 4+	Qty 10+
A	Male	4.8mm	5A	PT-4818	\$5.95	\$5.25	\$4.75
B	Female	4.8mm	5A	PT-4822	\$5.95	\$5.25	\$4.75
C	Male	6.4mm	10A	PT-4809	\$5.95	\$5.25	\$4.75
D	Female	6.4mm	10A	PT-4807	\$5.95	\$5.25	\$4.75
E	Female Ins.	6.4mm	10A	PT-4825	\$6.95	\$6.25	\$5.50
F	Piggyback	6.4mm	10A	PT-4810	\$6.95	\$6.25	\$5.50
G	Eye	5.3(ID)/8.0(OD)	5A	PT-4814	\$5.95	\$5.25	\$4.75
H	Fork	3.7(ID)/5.7(OD)	3A	PT-4823	\$5.95	\$5.25	\$4.75
I	Butt	4.7	5A	PT-4827	\$6.95	\$6.25	\$5.50
J	Male	4	5A	PT-4800	\$5.95	\$5.25	\$4.75
K	Female	4	5A	PT-4802	\$6.95	\$6.25	\$5.50

## EYE TERMINALS

### NON-INSULATED EYE TERMINALS

A range of non-insulated eye terminals for a variety of electronic or automotive applications.

See website for specifications.



ID	HOLE	CABLE ENTRY	PK	CURRENT (DC)	CAT.	Qty 1+	Qty 4+	Qty 10+
A	4mm	2.5mm <sup>2</sup>	8	20A	PT-4930	\$2.75	\$2.45	\$2.15
B	6mm	4mm <sup>2</sup>	8	30A	PT-4932	\$2.75	\$2.45	\$2.15
C	6mm	6mm <sup>2</sup>	8	35A	PT-4934	\$2.75	\$2.45	\$2.15
D	8mm	6mm <sup>2</sup>	8	35A	PT-4935	\$2.75	\$2.45	\$2.15
E	8mm	10mm <sup>2</sup>	8	40A	PT-4936	\$3.45	\$3.05	\$2.75
F	8mm	25mm <sup>2</sup>	4	50A	PT-4937	\$3.95	\$3.45	\$3.15
G	8mm	35mm <sup>2</sup>	4	60A	PT-4938	\$5.95	\$5.25	\$4.75
H	8mm	50mm <sup>2</sup>	2	100A	PT-4939	\$4.95	\$4.45	\$3.90
I	10mm	35mm <sup>2</sup>	2	120A	PT-4940	\$6.95	\$6.25	\$5.55

## CABLE CONNECTORS

### CRIMP WIRE CONNECTORS

The easy way to connect 2 or 3 wires together. Simply insert into the connector, & squeeze with a pair of pliers. They are filled with sealant to provide moisture resistance. Accepts cable up to 1.08mm OD.

• 5A rating

TYPE	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
(6 x 2 wire) & (2 x 3 wire)	8	HP-1214	\$4.95	\$4.45	\$3.90
2 Wire	50	HP-1270	\$10.95	\$9.75	\$8.75
3 Wire	50	HP-1272	\$14.95	\$13.35	\$11.70



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!

## CRIMP CONNECTORS

### NON-INSULATED SPADE CONNECTORS

More Crimping Tools on pages 228



ID	TYPE	SIZE	PK	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
A	Socket	6.3mm	10	10A	PT-4630	\$2.75	\$2.45	\$2.15
B	Plug	6.3mm	10	10A	PT-4631	\$2.75	\$2.45	\$2.15

### 6.3MM PCB MOUNT PCB SPADE CONNECTORS

Commonly used to connect power to a PCB board. They work perfectly with 6.3mm female spade connectors.

- PCB tag: 6.3mm
- Current rating: 30A
- Pitch: 5mm
- Thickness: 0.81mm



TYPE	SIZE	PK	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
PCB Mount	6.3mm	8	10A	PT-4914	\$2.65	\$2.35	\$2.10

### 6.3MM CHASSIS MOUNT DOUBLE SPADE

Pack of 8 pieces of 6.3mm chassis mount double spade connectors.

- Double Ended 6.3mm
- Chassis Mounting Hole: 4(Dia.)mm



TYPE	SIZE	PK	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
Chassis	6.3mm	8	10A	PT-4916	\$2.65	\$2.35	\$2.10

### PHONE TYPE CRIMP LUGS

Brass Spade width - 3.2mm

- Cable entry 2.5mm



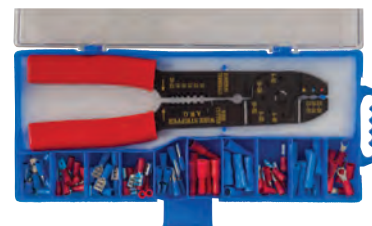
PT-4521

PACK	CURRENT	CAT.	Qty 1+	Qty 4+	Qty 10+
15	3A	PT-4520	\$2.95	\$2.60	\$2.30
100	3A	PT-4521	\$12.95	\$11.35	\$10.35

## CRIMP CONNECTOR PACKS

### AUTOMOTIVE CRIMP TOOL WITH 80 CONNECTORS

The tool will cut & strip wire, crimp connectors and also cut a range of metric bolts.



8 each of male & female blue bullets  
8 each of male & female blue spades  
8 x red eye connectors

8 each of male & female red bullets  
8 each of male & female red spades  
8 x blue butt joiners

PACK	CAT.	Qty 1+	Qty 3+	Qty 6+
80 Pieces	TH-1848	\$14.95	\$13.45	\$11.95

### 300 PIECE QC CRIMP CONNECTOR PACK

Contains 300pcs of only the most commonly-used quick connectors from our range of separately sold QC connectors. The insulation is injection-moulded Nylon rated to 105°C. With a moulded funnel taper in the insulation for easy cable entry. Beware of other QC connector packs that contain cheap vinyl connectors. Pack contains (300pcs in total):

#### RED - FOR 0.75 - 1.0MM CABLE

20 x female/20 x male bullet  
20 x 4mm/20 x 5mm ring  
20 x 4mm fork/25 x female spade  
25 x male spade/10 x cable joiner

#### YELLOW - FOR 4-6MM CABLE

5 x 5mm/5 x 6mm ring 5 x cable joiner



**BLUE - FOR 1.5 - 2.5MM CABLE**  
15 x female/20 x male bullet  
20 x 4mm/10 x 6mm ring  
25 x female/25 x male spade  
10 x cable joiner

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
300 Pieces	PT-4536	\$39.95	\$35.95	\$31.95



## ✓ GOLD CAR AUDIO CONNECTORS

### GOLD PLATED HIGH CURRENT CABLE JOI

If you have ever tried to connect, crimp or solder 8GA or even 4GA cable you will understand how convenient these gold-plated brass connectors are. Each cable termination is via gold grub screws and joiner is supplied with small transparent insulating heatshrink tube.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Suit 8GA cable	HC-4065	\$7.95	\$6.95	\$6.25
Suit 4GA cable	HC-4064	\$7.95	\$6.95	\$6.25

### GOLD PLATED TERMINALS

Supplied in pairs. 1 red and 1 black  
8GA QC GOLD CONNECTORS SMALL EYE



SPECIFICATIONS	PT-4560
Hole Size	3.7mm
Cable Hole Diameter	4.8mm
Size Including Cover	35mm
Metal Thickness	1mm

**AMP-KING**

PER PAIR	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black	PT-4560	\$2.75	\$2.45	\$2.15

### 8GA QC GOLD CONNECTORS LARGE EYE

Suits thinner cable (8GA):



SPECIFICATIONS	PT-4562
Hole Size	8.4mm
Cable Hole Dia	4.8mm
Size Including Cover	42mm

**AMP-KING**

PER PAIR	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black	PT-4562	\$2.95	\$2.60	\$2.30

### 4GA QC GOLD CONNECTORS LARGE EYE

Suits Large Cable (4GA)



SPECIFICATIONS	PT-4564
Hole Size	8.4mm
Cable Hole Dia	8mm
Size Including Cover	50mm
Metal Thickness	1.5mm

**AMP-KING**

PER PAIR	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black	PT-4564	\$3.95	\$3.45	\$3.15

## ✓ BUS BARS

### MACHINED BRASS BUS BAR - 8 WAY

These are usually used to give an electrically common point for earth wiring but are also useful for low voltage tie points, especially on boats or RV's, Caravans etc., 6 holes accept up to a 4.5mm wire bundle and the outer 2 a 6.0 bundle. The Bus bar has insulated standoffs at each end which can be removed so that the assembly can be screwed directly to a chassis. The standoffs have a conservative insulation rating of 1000V.



- All screws M4.0 Brass bar 9.0 x 6.0
- Length overall including standoffs: 100mm, without standoffs: 65mm

CAT.	Qty 1+	Qty 4+	Qty 10+
SZ-2003	\$6.95	\$6.25	\$5.50

### 150A INSULATED BUS BAR

This quality bus bar features a raised insulating base that isolates the bus bar from earthed or other live chassis. It features 2 x 5mm bolted terminals for connecting main power feeds, and 10 screw terminals for connecting lower current feeds of up to 10A each. Total current capacity is 150A, and is suitable for 12-32V wiring. 2 countersunk screw holes for 5mm metric fasteners.

- Not suitable for 240V active circuit
- Dimensions: 145(L) x 30(W) x 40(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
SZ-2012	\$16.95	\$15.25	\$13.55

### 2GA QC GOLD CONNECTORS EYE

Suits 2GA cable.



SPECIFICATIONS	PT-4565
Eye Hole Size	12.7mm
Cable Hole Dia.	9.6mm
Size Including Cover	60mm
Metal Thickness	1.5mm

**AMP-KING**

PER PAIR	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black	PT-4565	\$5.95	\$5.25	\$4.75

### 0GA QC GOLD CONNECTORS EYE

Suits thick cable (0GA)



SPECIFICATIONS	PT-4567
Hole Size	8.4mm
Cable Hole Dia	11.8mm
Size Including Cover	60mm
Metal Thickness	1.6mm

**AMP-KING**

PER	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black	PT-4567	\$6.95	\$6.25	\$5.50

### 8GA QC GOLD CONNECTORS FORKED SPADE TERMINALS

Suits thinner cable (8GA)



SPECIFICATIONS	PT-4566
Hole Size	3.7mm
Cable Hole Dia	4.8mm
Size Including Cover	33mm

**AMP-KING**

PER PAIR	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black	PT-4566	\$2.95	\$2.60	\$2.30

### 8GA QC CONNECTORS FORKED SPADES

Standard quick connect lugs that fit speaker terminals etc.

- Cable hole diameter - 3.7mm



**AMP-KING**

PER PAIR	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x Red & 1 x Black	PT-4568	\$2.50	\$2.21	\$1.95

## ✓ GOLD POWER DISTRIBUTION BLOCKS

### GOLD POWER DISTRIBUTION BLOCK

This block will accept one 4GA wire in, and distribute to four 8GA out.

- Size includes mounting bracket

**AMP-KING**

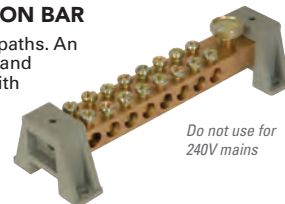


	CAT.	QTY 1+	QTY 4+	QTY 10+
63(L) x 50(W) x 12(H)mm	HC-4020	\$12.95	\$11.35	\$10.35

### 16 WAY 100A BRASS DISTRIBUTION BAR

An ideal way to distribute high current paths. An 8mm stud provides for incoming cable and distribution is via 16 screw terminals with 7mm cable entry holes.

- Solid brass with high quality plastic bridge mounts
- Rated for 100A



**AMP-KING**

	CAT.	QTY 1+	QTY 4+	QTY 10+
112(L) x 18(W) x 12(H)mm	SZ-2004	\$9.95	\$8.75	\$7.75



To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.



## ✓ HIGH CURRENT CONNECTORS

Used widely in both domestic & industry, you'll find these used in many 4WD, boating, automotive and other industry applications. Supplied individually with a pair of contacts, all 5 current ratings have an operating temperature of -20° to +120°C.

### INDIVIDUAL NESTING CONNECTORS

They are genderless which means that there is no separate plug and socket and can be easily stacked to make custom configurations. Supplied as a red & black pair with contacts.

- Voltage: 600V (AC or DC)



See page 228 for our Anderson Crimping Tool.



SPECIFICATIONS	PT-4402	PT-4405
Contact Rating	15A	30A
Contact Wire Size	0.52-1.3mm2 (20-16AWG)	1.63-2.59mm (10-14AWG) closed barrel
Max Wire Insulation Dia	2.54mm	4.4mm
Contact Retention Force	9kg (20lbs)	9kg (20lbs)
Operating Temperature	-20 to +105°C	-40 to +125°C

SPECIFICATIONS	PT-4406	PT-4407
Contact Rating	45A	75A
Contact Wire Size	1.63-2.59mm (10-14AWG) closed barrel	1.3mm - 13mm (6 - 16AWG)
Max Wire Insulation Dia	4.4mm	1.3 - 13.3mm
Contact Retention Force	9kg (20lbs)	22kg (50lbs)
Operating Temperature	-40 to +125°C	-40 to +125°C

CABLE AWG	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 50+
20-16	15A	PT-4402	\$3.95	\$3.55	\$3.15
10-14	30A	PT-4405	\$4.95	\$4.45	\$3.90
10-14	45A	PT-4406	\$4.95	\$4.45	\$3.90
6-16	75A	PT-4407	\$11.95	\$10.70	\$9.50

### ANDERSON 35A SBS MINI CONNECTORS

These compact mini connectors can handle up to 600V continuous in AC or DC with current up to 35A. The mechanical & colour coded keys protect against accidental cross mating of connectors. The genderless housing makes for easy assembly and the touch-safe housing prevents accidental exposure to live circuits and these also have the ability to disconnect under load. Supplied as a moulded 2 pole with contacts.

- All colours have the same electrical rating



SPECIFICATIONS	PT-4480	PT-4482	PT-4484
Housing Colour	Black	Red	Grey
Contact Rating	35A	35A	35A
Contact Wire Size	10 AWG	10 AWG	10 AWG
Voltage Rating	600 (AC or DC)	600 (AC or DC)	600 (AC or DC)
Max Wire Insulation	4.0mm2	4.0mm2	4.0mm2
Operating Temp.	-20°C to 105°C	-20°C to 105°C	-20°C to 105°C
Anderson Part No	B02265G2	B02265G1	B02265G4

	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 50+
Black	35A	PT-4480	\$7.95	\$7.15	\$6.25
Red	35A	PT-4482	\$7.95	\$7.15	\$6.25
Grey	35A	PT-4484	\$7.95	\$7.15	\$6.25

### ANDERSON POWERPOLE SERIES 4 PIN DATA CONNECTOR

A genderless 4 pole signal Anderson connector in a PP15 casing. The design allows you to stack this with the PP15 series 15A Anderson connector (PT-4402) for DC and signal wiring connectivity. It provides a secure quick disconnect for power and signal distribution systems.

- Voltage: 300V
- Up to 24 gauge for signal wire connectivity
- Dimensions: 25(L) x 8(W) x 8(H)mm



	CURRENT	CAT.	Qty 1+
Stackable	7A	PT-4403	\$14.95

## Find Out More In Store:

Our staff offer friendly and helpful service. We're here to help.

### 4 WAY 15A ANDERSON CONNECTORS

These are the high impact and corrosion-resistant black thermoplastic outer shells with a 4 way 15A Anderson® multi-connectors. They allow easy connection and disconnection for the electrical equipment in commercial and industrial applications. The cable clamps provides strain relief and integral latches to prevent any accidental disconnections of your equipment. The positive latching provides security in applications where shock or vibration may be severe and the integral strain relief to reduce the risk of wire breakage.

#### 4 WAY 15A - PT-4434

- Dimensions: 53(L) x 32(W) x 22(H)mm

#### 4 WAY 15A WITH LATCH - PT-4436

- Dimensions: 53(L) x 32(W) x 22(H)mm



	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 50+
4 Way	15A	PT-4434	\$12.95	\$11.35	\$10.35
4 Way with Latch	15A	PT-4436	\$12.95	\$11.35	\$10.35

### ANDERSON 50A HIGH CURRENT CONNECTORS

Used widely in both domestic and industry, you'll find this connector in many 4WD applications, boating, automotive and other industries. Supplied as a moulded 2 pole with contacts.



SPECIFICATIONS	PT-4425	PT-4427	PT-4420
Contact Rating			50A
Contact Wire Size	8 AWG	12-10 AWG	13.3mm2 (6 AWG)
Voltage Rating			600V (AC or DC)
Max Wire Insulation Diameter			11mm
Contact Retention Force			22kg
Operating Temperature			-20 to +105°C
Anderson Part No.			SB50-6319

CABLE AWG	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 50+
8	50A	PT-4425	\$9.95	\$8.95	\$7.95
12-10	50A	PT-4427	\$9.95	\$8.95	\$7.95
6	50A	PT-4420	\$9.95	\$8.75	\$7.75

### MOULDED PAIR

Used widely in both domestic and industry, you'll find this connector in many 4WD applications, boating, automotive and other industries. Supplied as a moulded 2 pole with contacts.



SPECIFICATIONS	PT-4422	PT-4424
Contact Rating	120A	175A
Contact Wire Size	3.6mm2 (#2 AWG)	53.5mm2 (#1/0 AWG)
Voltage Rating	600V (AC or DC)	600V (AC or DC)
Max Wire Insulation Diameter	14.6mm	19mm
Contact Retention Force	45.5kg (100lb)	137kg (300lb)
Operating Temperature	-20 to +125°C	-20 to +125°C
Anderson Part No.	B120-6800G1	SB175-6325G1

CABLE AWG	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 50+
2	120A	PT-4422	\$19.95	\$17.70	\$15.70
1/10	175A	PT-4424	\$29.95	\$26.90	\$23.70

### DUST/WATER RESISTANT RUBBER COVERS

A water and dust resistant rubber cover to suit our Anderson style connectors.



SUITS	CURRENT	CAT.	Qty 1+	Qty 10+	Qty 50+
PT-4420/25/27	50A	PM-4434	\$7.95	\$7.15	\$6.35
PT-4422	120A	PM-4432	\$14.95	\$13.45	\$11.95
PT-4424	175A	PM-4430	\$17.95	\$15.95	\$13.95

### HANDLES FOR ANDERSON STYLE CONNECTORS

Facilitates easy connection/ disconnection. Ensures a secure grip, even with gloved hands for easier charging of electric forklifts etc.

Suits Anderson Style Connectors

50A	CAT. PT-4420	CAT. PM-4436
120A	CAT. PT-4422	CAT. PM-4438
175A	CAT. PT-4424	CAT. PM-4439



SUITS	CAT.	Qty 1+	Qty 10+	Qty 50+
PT4420/25/27	PM-4436	\$5.95	\$5.35	\$4.75
PT-4422	PM-4438	\$7.95	\$7.15	\$6.35
PT-4424	PM-4439	\$19.95	\$17.95	\$15.95



## ✓ HIGH CURRENT CONNECTORS & ACCESSORIES

This new range enables you to chassis or panel mount Anderson plugs. Something you have not been able to do in the past. There are also waterproofing boots, etc.

### 50A CHASSIS MOUNT ANDERSON ADAPTORS

Black 50 amp cover assembly with locking device and UV insulated protection to suit Anderson & Anderson style connectors. Used for protection of power connectors in mobile environments. The intelligent design ensures a safe & reliable connection for towing, battery charging, marine and industrial OEM applications.

- Heavy duty materials for protection from the elements
- Compatible with most power connector brands
- Unique locking tab for secure connections
- Power connector snap fits into the cover
- Retractable access cover
- Heavy duty PA nylon construction



CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
50A	PT-4460	\$19.95	\$17.70	\$15.70

### 175A CHASSIS MOUNT ANDERSON ADAPTORS

Black 175 amp cover assembly with locking device and UV insulated protection to suit Anderson and Anderson style connectors. Used for protection of power connectors in mobile environments. The intelligent design ensures a safe and reliable connection for towing, battery charging, marine and industrial OEM applications.

- Heavy duty materials for protection from the elements
- Compatible with most power connector brands
- Unique locking tab for secure connections
- Power connector snap fits into the cover
- Retractable access cover
- Heavy duty PA nylon construction



CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
175A	PT-4464	\$27.95	\$24.95	\$22.35

### 50 AMP CONNECTOR COVER ASSEMBLY QUICKFIT

Anderson type quick fit connector cover. Suits charging systems for caravans, trailers, solar, marine, industrial.



CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
50A	PT-4466	\$25.95	\$23.35	\$20.70

### 50A RED CHASSIS MOUNT ANDERSON ADAPTORS

Red 50 amp cover assembly with locking device and UV insulated protection to suit Anderson and Anderson style connectors. Used for protection of power connectors in mobile environments. The intelligent design ensures a safe and reliable connection for towing, battery charging, marine and industrial OEM applications.

- Heavy duty materials for protection from the elements
- Compatible with most power connector brands
- Unique locking tab for secure connections
- Power connector snap fits into the cover
- Retractable access cover



CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
50A	PT-4470	\$19.95	\$17.70	\$15.70

### PANEL MOUNT ANDERSON CONNECTOR

Flush mount Anderson type quick fit connector cover. Suits charging systems for caravans, trailers, solar, marine, industrial.



CAT.	Qty 1+	Qty 3+	Qty 6+
PT-4472	\$24.95	\$22.35	\$19.70

### DUSTPROOF RUBBER BOOT FOR 50A ANDERSON MOUNTS

Rubber sleeve for water, dust and UV protection of Anderson style connectors.



CAT.	Qty 1+	Qty 3+	Qty 6+
PT-4474	\$3.95	\$3.50	\$3.15

### WATERPROOF ANDERSON CONNECTORS

These soft shell boots provide water, dirt, chemical and UV protection for the high current Anderson connectors. The durable boots shield the connectors from water and dirt to IP64 when connected or by itself when the integral cover is used. The terminals of the rubber boot can also be customised to fit cables in-between 12-6 AWG (4-16mm<sup>2</sup>) wires.

- IP64 protection
- Resistant to UV, Roadway Chemical and Ozone
- Splash resistant when connected and by itself when the integral cover is used
- Customise boot terminals to fit your cables from 12-6 AWG which is 4-16mm<sup>2</sup>
- Mountable

Dimensions when connected: 151(H) x 55(W) x 160(L)mm

#### 50A LOAD RUBBER BOOT

- 85(H) x 55(L) x 20(W)mm

CAT. PT-4428

#### 50A SOURCE RUBBER BOOT

- 85(H) x 55(L) x 20(W)mm

CAT. PT-4429

#### 120A BOOT LOAD SIDE

- 112(H) x 57(L) x 39(W)mm

CAT. PT-4431

#### 120A BOOT SOURCE SIDE

- 118(H) x 59(L) x 39(W)mm

CAT. PT-4432

#### 175A BOOT LOAD SIDE

- 135(H) x 77(L) x 42(W)mm

CAT. PT-4438

#### 175A BOOT SOURCE SIDE

- 135(H) x 68(L) x 42(W)mm

CAT. PT-4439



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Boots to Suit 50A Male	PT-4428	\$15.95	\$14.35	\$12.75
Boots to Suit 50A Female	PT-4429	\$16.95	\$15.25	\$13.55
Boots to Suit 120A Male	PT-4431	\$24.95	\$22.45	\$19.95
Boots to Suit 120A Female	PT-4432	\$24.95	\$22.45	\$19.95
Boots to Suit 175A Male	PT-4438	\$24.95	\$22.50	\$19.95
Boots to Suit 175A Female	PT-4439	\$29.95	\$26.95	\$23.95

### 50A ANDERSON PLUG TO INSULATED BATTERY CLAMPS

Tough insulated battery clamps connected to an Anderson plug. Ideal for connecting a solar panel, portable fridge, compressor, or inverter to a battery.

- 8 AWG cable/ 50A rated
- Insulated battery clamps
- Length: 300mm



LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+
300mm	PT-4449	\$24.95	\$22.45	\$19.95

### HIGH CURRENT 60A LEADS

A series of high current connector leads for automotive, caravan, 4WD or industrial interconnection. The design of the Anderson connector housing is genderless, whereby each connector simply interconnects with another so you can't plug them in the wrong way - one less thing to worry about! Each lead is pre-made with machine crimped terminations, and tinned copper cable. Connectors are rated at 50Amps, with either 8AWG cable or 16AWG cable fitted depending on the model.



ANDERSON TO:	LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+
Plug Extension Lead	5m	PT-4440	\$79.95	\$71.95	\$63.95
Piggyback Lead	300mm	PT-4442	\$34.95	\$31.45	\$27.90
Eye Terminal Lead	300mm	PT-4444	\$14.95	\$13.45	\$11.95
Cigarette Plug Lead	300mm	PT-4446	\$16.95	\$14.95	\$13.35
Cigarette Socket Lead	300mm	PT-4448	\$16.95	\$14.95	\$13.35
2 x Cigarette Socket Lead	300mm	PT-4447	\$24.95	\$22.45	\$19.95



## ✓ DC PLUGS, SOCKETS & ADAPTORS

### LINE PLUGS

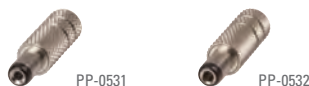
#### LINE - FEMALE PLASTIC



9.5MM SHAFT LENGTH	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
0.7(ID) x 2.5(OD)mm	1.0A	PP-0503	\$1.95	\$1.75	\$1.55
1.0(ID) x 3.8(OD)mm	1.5A	PP-0504	\$1.95	\$1.75	\$1.55
1.3(ID) x 3.5(OD)mm	1.8A	PP-0506	\$1.95	\$1.75	\$1.55
1.6(ID) x 5.2(OD)mm	2.0A	PP-0508	\$1.95	\$1.75	\$1.55
1.7(ID) x 4.0(OD)mm	2.5A	PP-0507	\$1.95	\$1.75	\$1.55
1.7(ID) x 4.75(OD)mm	2.5A	PP-0505	\$1.95	\$1.75	\$1.55
2.1(ID) x 5.5(OD)mm	3.0A	PP-0510	\$1.95	\$1.75	\$1.55
10MM SHAFT LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+	
2.5(ID) x 5.5(OD)mm	5.0A	PP-0511	\$1.95	\$1.75	\$1.55
3.1(ID) x 6.3(OD)mm	6.0A	PP-0513	\$1.95	\$1.75	\$1.55
14MM SHAFT LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+	
2.1(ID) x 5.5(OD)mm	3.0A	PP-0509	\$1.95	\$1.75	\$1.55
2.5(ID) x 5.5(OD)mm	5.0A	PP-0512	\$1.95	\$1.75	\$1.55
RIGHT ANGLE 9.5MM SHAFT LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+	
2.1(ID) x 5.5(OD)mm	3.1A	PP-0514	\$2.65	\$2.30	\$2.07
RIGHT ANGLE 14MM SHAFT LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+	
2.5(ID) x 5.5(OD)mm	5.0A	PP-0515	\$2.65	\$2.30	\$2.07

#### LINE - FEMALE METAL BODY

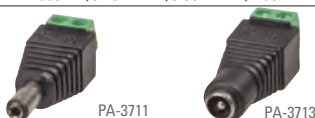
- 9.5mm shaft



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
2.1(ID) x 5.5(OD)mm	3A	PP-0531	\$3.75	\$3.30	\$2.95
2.5(ID) x 5.5(OD)mm	5A	PP-0532	\$3.75	\$3.30	\$2.95

### 2.1MM DC CONNECTORS

- 3.0A rated



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
Plug - Screw Terminals	3A	PA-3711	\$4.95	\$4.45	\$4.00
Socket - Screw Terminals	3A	PA-3713	\$4.95	\$4.45	\$4.00

### ILLUMINATED POLARITY SENSING DC CONNECTORS

These detect and indicate the polarity of your power connections with integrated LEDs. The LED lights up blue for centre positive, red for centre negative or purple for AC voltage. They also shine brighter as voltage increases.

- 5-30 VAC/VDC range - 3A rated
- 1 metre lead length



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 2+	Qty 4+
Inline Plug	3A	WQ-7288	\$6.95	\$6.25	\$5.90
Inline Socket	3A	WQ-7289	\$7.95	\$6.95	\$6.75

### WATERPROOF 2.1MM DC CONNECTORS WITH PIGTAIL LEADS

The same connector set fitted to our waterproof LED strip lights with standard 2.1(ID) x 5.5(OD)mm DC connection with an IP67 rated coupling. Supplied pre-fitted to a 100mm pigtail lead, allowing you to make up your own lead sets.

- Cables are 20AWG
- 3A max at 12VDC



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
Waterproof	3A	PS-0785	\$7.95	\$7.15	\$6.25

### LINE SOCKETS

#### LINE - MALE

Plastic body



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
2.1mm	3.0A	PS-0526	\$3.45	\$3.05	\$2.75
2.5mm	5.0A	PS-0528	\$3.45	\$3.05	\$2.75
1.00mm - Suits Nokia	500mA	PS-0540	\$2.45	\$2.15	\$1.95

### LINE SOCKETS

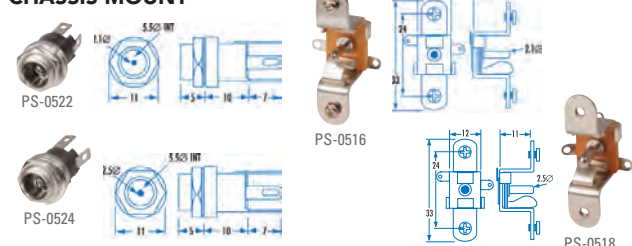
#### LINE - MALE

Metal body



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
2.1mm	3.0A	PS-0534	\$3.95	\$3.45	\$3.15
2.5mm	5.0A	PS-0536	\$3.95	\$3.45	\$3.15

### CHASSIS MOUNT



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
2.1mm Chassis	3.0A	PS-0516	\$1.95	\$1.75	\$1.55
2.5mm Chassis	5.0A	PS-0518	\$1.95	\$1.75	\$1.55
2.1mm Bulkhead	3.0A	PS-0522	\$2.95	\$2.60	\$2.30
2.5mm Bulkhead	5.0A	PS-0524	\$2.95	\$2.60	\$2.30

### SURFACE MOUNT MALE DC POWER CONNECTORS

SPST contacts



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
2.1mm	3.0A	PS-0519	\$1.95	\$1.75	\$1.55
2.5mm	5.0A	PS-0520	\$1.95	\$1.75	\$1.55

### 0.7MM PCB MOUNT DC SOCKET WITH SPST SLIDE SWITCH

- Snap-in, PCB mounted 0.7mm DC power socket
- SPST black On/Off slide switch
- Electrical rating: 2A @ 15VDC
- Contact resistance: <30m ohm (max)
- Insulation resistance: 100M ohm (min)
- Electrical life: 30,000 cycles
- Dimensions: 15(L) x 10(W) x 14.6(D)mm



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
0.7mm PCB	2A	PS-0532	\$3.95	\$3.55	\$3.15

### 2.1MM PCB MOUNT DC SOCKET WITH SPST ROCKER SWITCH

- Snap-in, PCB mounted DC power socket with rocker switch.
- Electrical rating: 3.0A @ 15VDC
- Contact resistance: <20m ohm (initial)
- Insulation resistance: 1000M ohm (500VDC between open contacts)
- Dielectric strength: >1500V 1 minute
- Electrical life: 6,000 cycles
- Overall dimensions: 24.5(L) x 9.0(W) x 14.1(D)mm



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
2.1mm PCB	3A	PS-0531	\$3.95	\$3.55	\$3.15

### DC POWER ADAPTORS



TYPE	CURRENT (DC)	CAT.	Qty 1+	Qty 10+	Qty 50+
1.3mm Plug to 2.5mm Socket	1A	PA-3700	\$2.95	\$2.60	\$2.30
1.3mm Plug to 2.1mm Socket	1A	PA-3702	\$2.95	\$2.60	\$2.30
2.1mm Plug to 2.5mm Socket	1A	PA-3704	\$2.95	\$2.60	\$2.30
2.5mm Plug to 2.1mm Socket	1A	PA-3706	\$2.95	\$2.60	\$2.30
2.1mm Plug to 2.1mm Socket	3A	PA-3701	\$3.45	\$3.05	\$2.75
2.1mm Plug to 2.1mm Plug	3A	PA-3707	\$2.95	\$2.60	\$2.30



## HARSH ENVIRONMENT

### IP67 RATED MULTIPLE POLE HARSH ENVIRONMENT CONNECTORS

C16-1 series connectors offer 3 or 6 pole with pre-engaging earth contact. The mating parts screw together securely to provide environmental protection to IP67.



SPECIFICATIONS	3 POLE + PE*	6 POLE + PE*
Current Rating	16A	10A
Voltage Rating	380VAC 450VDC	
Insulation Resistance	>10Gohms	
Contact Resistance	<5mohms	
Max Wire Size	2.5mm <sup>2</sup>	0.75mm <sup>2</sup>

#### 6 POLE

	CAT.	Qty 1+	Qty 10+	Qty 50+
PE Line Plug	PP-1000	\$19.95	\$17.70	\$15.70
PE Line Socket	PS-1001	\$19.95	\$17.70	\$15.70
PE Chassis Plug	PP-1002	\$13.95	\$12.35	\$10.95
PE Chassis Socket	PS-1003	\$13.95	\$12.35	\$10.95
Plug Dust Cap	PP-1004	\$9.95	\$8.75	\$7.75



ENVIRONMENTAL	ALL MODELS
Temperature Range	-40°C to +100°C
Protection	IP67 to IEC60529/ DIN40050
Housing	Polyamide 66 Nylon
Strain Relief	Screw clamp & Gland Nut

Note:

\* Means Pre-Engaging.



#### 3 POLE

	CAT.	Qty 1+	Qty 10+	Qty 50+
PE Line Plug	PP-1006	\$17.95	\$15.95	\$14.35
PE Line Socket	PS-1007	\$17.95	\$15.95	\$14.35
PE Chassis Plug	PP-1008	\$12.95	\$11.35	\$10.35
PE Chassis Socket	PS-1009	\$12.95	\$11.35	\$10.35
Socket Dust Cap	PS-1005	\$9.95	\$8.75	\$7.75

### L7W IP67 HARSH ENVIRONMENT CIRCULAR CONNECTORS

Perfect for harsh environments such as marine, industrial, outdoor, automotive, etc.

- IP67 rated
- Locking bayonet connection
- Gold plated

- UL rated
- Wide temperature: -40°C to 105°C
- Solder pins
- 2pin versions rated to 5A
- 4 & 6 pin versions rated to 2A



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Pin Line Socket	PS-0541	\$14.95	\$13.45	\$11.95
2 Pin Panel Mount Plug	PP-0542	\$8.95	\$7.95	\$6.95
4 Pin Line Socket	PS-0543	\$19.95	\$17.95	\$15.95
6 Pin Line Socket	PS-0545	\$15.95	\$14.35	\$12.75
Dust Cap to suit PP-0544	PS-0547	\$6.95	\$6.25	\$5.50



## M8 CIRCULAR

Commonly used in process control instrumentation.

All connectors are field installable.

- 3A rated

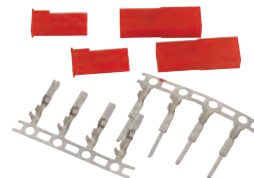


TYPE	CAT.	Qty 1+
3 Way Plug	PP-4300	\$4.95
4 Way Plug	PP-4302	\$4.95
3 Way Socket	PS-4301	\$4.95
3 Way Socket	PS-4303	\$4.95

## JST CRIMP

### JST CRIMP CONNECTORS 2 WAY

JST type crimp connectors for hobby use. Extensively used on batteries and other connectors in RC hobbies and models. Sold as a pair of 2 mating M/F connectors. Suitable for cable up to 1.3mm OD.



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PT-4452	\$4.95	\$4.45	\$3.90

## DEANS & BULLET STYLE

### 60A 2 POLE GOLD PLATED CONNECTOR SET

These are the industry standard in high performance connectors. Rated number one by RC Car Action, the world's leading RC car racing magazine. These connectors offer considerably less resistance than their competitors and are rated at 60 amps. Supplied as a pair.



RATING		CAT.	Qty 1+	Qty 10+	Qty 50+
60A	Pair	PT-4450	\$3.95	\$3.45	\$3.15

### EC3 BULLET CONNECTORS

Polarity sensitive EC3 bullet style plug and socket. Commonly used to connect Li-Po batteries to RC motors.

- Solder type. 1 plug and socket per packet



RATING	CAT.	Qty 1+	Qty 10+	Qty 50+
40A	PT-4456	\$4.95	\$4.45	\$4.00

### EC5 BULLET CONNECTORS - PLUG & SOCKET

Essentially 5mm banana connectors in a case capable of up to 120 continuous amp with 10 awg wire. The popularity of this connector has grown as it is now widely used on RC & portable power products.

- Sold as a pair of plug & socket



RATING	CAT.	Qty 1+	Qty 10+	Qty 50+
40A	PT-4454	\$4.95	\$4.45	\$4.00

### XT60 2 WAY BULLET CONNECTORS

Made from high temperature nylon with gold plated terminals. Ensures a solid high current connection that will handle 65 amps constant.

- Solder type. One plug & socket per packet



RATING	CAT.	Qty 1+	Qty 10+	Qty 50+
65A	PT-4458	\$4.95	\$4.45	\$4.00

### NBN 8 PIN CONNECTOR WITH BARE LEADS 30CM

This NBN Replacement connector is a Molex 8 Pin plug pre-assembled with 2C 30cm cable with bare ends. Simply clip the connector of any standard 12V 2.5A plug pack and solder/ heat shrink this connector on. This power supply can now be used to bypass your NBN battery back-up.



	CAT.	Qty 1+	Qty 10+	Qty 50+
Molex for NBN Battery	PP-2028	\$4.95	\$4.45	\$3.95

## ✓ HEATSHRINK

### HEATSHRINK TUBING - 5m ROLL - 2:1

Purchase as a 5m box that can be neatly stacked and organised in the workshop or tradesman's van. Shrink with a heat gun, hairdryer or gas burner.

- 2:1 ratio



SPECIFICATIONS	ALL MODELS
Material	Polyethylene
Shrink Ratio	2:1
Operating Temperature	-55 to 125°C
Shrink Temperature	Start at 70°C and full recovery at 110°C
Flammability	VW-1
Approvals	RoHS and UL224
Colour	Black & Red
Roll Length	5m
Box Dimensions	49(W) x 177(H) x 165(D)mm

**2:1 SHRINK RATIO  
HALOGEN FREE**

**SOLD BY THE  
5M BOX**

DIA	SHRINKS TO	BLACK	RED	1 + ROLLS	4+ ROLL	10+ ROLLS
1.5mm	0.75mm	WH-5680	WH-5690	\$5.45	\$4.90	\$4.30
2.5mm	1.25mm	WH-5681	WH-5691	\$6.45	\$5.75	\$5.15
3.0mm	1.5mm	WH-5682	WH-5692	\$6.95	\$6.25	\$5.50
5.0mm	2.5mm	WH-5683	WH-5693	\$8.95	\$8.25	\$6.95
10.0mm	5mm	WH-5684	WH-5694	\$10.95	\$9.75	\$8.75
16.0mm	8mm	WH-5685	WH-5695	\$14.95	\$13.45	\$11.95
20.0mm	10mm	WH-5686	WH-5696	\$21.95	\$19.75	\$17.75

### HEATSHRINK TUBING WITH GLUE LINING 4:1

The heat sensitive glue on the internal wall of the tube melts when heat is applied, allowing for a professional water and dust resistant seal.

- Black in colour and sold in 1.2m lengths
- 4:1 shrink ratio

**4:1 SHRINK RATIO  
HALOGEN FREE**



SIZE(mm)	SHRINKS TO (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
4	1	WH-5640	\$4.95	\$4.45	\$3.90
6	1.5	WH-5641	\$5.65	\$4.95	\$4.45
8	2	WH-5642	\$6.45	\$5.75	\$4.95
12	3	WH-5643	\$7.45	\$6.50	\$5.75
16	4	WH-5644	\$7.95	\$6.95	\$6.25
19	4.75	WH-5645	\$11.95	\$10.70	\$9.50
24	6	WH-5646	\$12.95	\$11.35	\$10.35



### HEATSHRINK TUBING - 1.2M LENGTHS - 2:1

Our heatshrink is flexible and made from flame-resistant polyolefin.

- Made to UL224 E180908 125°C
- Shrinks to 50% of its size
- Shrink with a heatgun, hairdryer or a gas burner, match etc

DIA (mm)	SHRINKS TO (mm)	GREEN	BLACK	RED	CLEAR	BLUE	WHITE	YELLOW	QTY 1+	QTY 4+	QTY 10+
1.5	0.75	WH-5510	WH-5530	WH-5540	WH-5550*	WH-5560	WH-5570	WH-5590	\$1.45	\$1.30	\$1.15
2.5	1.25	WH-5511	WH-5531	WH-5541	WH-5551*	WH-5561	WH-5571	WH-5591	\$1.65	\$1.45	\$1.30
3.0	1.5	WH-5512	WH-5532	WH-5542	WH-5552*	WH-5562	WH-5572	WH-5592	\$1.85	\$1.65	\$1.45
5.0	2.5	WH-5513	WH-5533	WH-5543	WH-5553*	WH-5563	WH-5573	WH-5593	\$1.95	\$1.75	\$1.55
6.0	3	WH-5514	WH-5534	WH-5544	WH-5554*	WH-5564	WH-5574	WH-5594	\$2.25	\$1.95	\$1.80
10	5	WH-5515	WH-5535	WH-5545	WH-5555*	WH-5565	WH-5575	WH-5595	\$2.95	\$2.60	\$2.30
16	8	WH-5516	WH-5536	WH-5546	WH-5556*	WH-5566	WH-5576	WH-5596	\$3.95	\$3.45	\$3.15
20	10	WH-5517	WH-5537	WH-5547	WH-5557*	WH-5567	WH-5577	WH-5597	\$5.75	\$4.95	\$4.60

\* Clear heatshrink not halogen free.



**2:1 SHRINK RATIO  
HALOGEN FREE  
ALL SIZES  
1.2 METRE LENGTHS**

### 161 PIECE HEATSHRINK PACK WITH GAS POWERED HEAT BLOWER

A great addition to your workshop or toolbox. The handy box includes an assortment of 160 heatshrink tubes in 7 different colours and diameters, plus 1 gas powered heat gun with Piezo ignition and flame or flame-less output. All supplied in a transparent lightweight box that measures.

- Dimensions: 242(L) x 175(W) x 30(H)mm
- Use NA-1020 Butane Gas



SIZE	COLOUR
15mm x 500mm	Black
1.5mm x 100mm	10 x green, red, yellow, blue, white & transparent
2.5mm x 100mm	6 x green, red, yellow, blue & transparent, 5 x white
3.5mm x 100mm	4 x green, red, yellow, blue & white, 4 x transparent
5.0mm x 100mm	3 x green, yellow, blue & white, 4 x red & transparent
6.0mm x 100mm	2 x red, yellow, blue & transparent, 1 x green & white
10mm x 100mm	2 x red, yellow, blue & transparent, 1 x green & white

PACK	CAT.	Qty 1+	Qty 3+	Qty 6+
161 Pieces	TH-1620	\$39.95	\$35.90	\$31.90

### HEAT SHRINKABLE BRAIDED SLEEVING

Provides added protection to cables against flames and abrasion. Consists of polyester multi-filament and special modified polyolefin filament, which will shrink when exposed to a heat source (Heat gun recommended). The unique woven construction makes it extremely flexible and easy to install on the hoses with irregular shapes.

SPECIFICATIONS	ALL MODELS
Operating Range	-40°C to 125°C
Minimum Shrink Temperature	80°C
Minimum Fully Recovery Temperature	120°C
Flammability	Self-extinguishing
Shrinking Ratio	2:1
Approved	RoHS, Halogen Free
Shrink Ratio	2:1
Length	1.2mm



SIZE (mm)	SHRINKS TO (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
10	5	WH-5620	\$3.95	\$3.45	\$3.15
20	10	WH-5622	\$4.95	\$4.45	\$3.90
25	12.5	WH-5624	\$6.95	\$6.25	\$5.55
30	15	WH-5626	\$8.95	\$7.95	\$6.95

### YELLOW & GREEN HEATSHRINK TUBING

- 1.2m lengths
- Ideal for indicating earth connections

**ABRASION RESISTANT & FLAME RETARDANT - 2:1 SHRINK RATIO**



SIZE (mm)	SHRINKS TO (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
3	1.5	WH-5610	\$2.95	\$2.60	\$2.30
10	5	WH-5612	\$3.95	\$3.45	\$3.15

### HEATSHRINK TUBE - 50MM BLACK

Ideal for bundling battery packs, but also used for grips on kayak paddles etc. 2:1 shrink rate. Supplied in 300mm lengths.



**2:1 SHRINK RATIO  
HALOGEN FREE**

SIZE (mm)	SHRINKS TO (mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
50	25	WH-5582	\$3.95	\$3.45	\$3.15



## HEATSHRINK PACKS

### COMPREHENSIVE HEATSHRINK PACK

- 1 length each of 7 different colours in 7 different sizes ranging from 1.5mm diameter to 20mm.
- Sizes: 1.5, 3, 5, 6, 10, 16 & 20mm

Note: Clear is NOT Halogen Free.

**2:1 SHRINK RATIO  
HALOGEN FREE**



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
7 Pieces	WH-5520	\$14.50	\$12.95	\$11.35

### GLUE LINED PRE-CUT HEATSHRINK TUBING - TRADE PACK

A box of six common sizes of 95mm long glue lined heatshrink. Includes 20 pcs 4.0mm, 15pcs. 6.0mm, 10pcs 8.0mm, 5pcs 12mm, 5pcs 16mm & 5pcs 19mm - 60pcs total. This is an economical way to get this product.

- Supplied in a see-through nylon snap shut case
- Box dimensions: 205(W) x 108(D) x 35(H)mm



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
60 Pieces	WH-5521	\$29.95	\$26.90	\$23.70

### HANDY HEATSHRINK PACK

Handy Heatshrink Pack Handy assortment of our high quality heatshrink tubing. Sizes from 1.5mm to 10mm.

- 10 pieces in all of 300 & 150mm length
- Colour Red & Black

**2:1 SHRINK RATIO  
HALOGEN FREE**



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
10 Pieces	WH-5525	\$7.95	\$6.95	\$6.25

### HEATSHRINK ASSORTMENT TRADE PACK

All the heatshrink the technician, tradesman or serious hobby user will ever need. The pack contains 160 lengths of different sizes in a handy storage case.

- 1.5mm: 40 x black, 10 x red, 10 x clear
- 2.5mm: 25 x black, 5 x red, 5 x clear
- 3mm: 17 x black, 4 x red, 4 x clear
- 5mm: 14 x black, 3 x red, 3 x clear
- 6mm: 6 x black, 2 x red, 2 x clear
- 10mm: 6 x black, 2 x red, 2 x clear
- Case size: 205(L) x 110(W) x 35(H)mm



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
160 Pieces	WH-5524	\$19.95	\$17.95	\$15.95

## HIGH TEMPERATURE SLEEVING

### HIGH TEMPERATURE BASALT FIBRE SLEEVING

This protective sleeve has been woven from extruded volcanic rock and is the ultimate in cable protection! It will handle temperatures up to 650°C (Our previous fibreglass based product only went up to 450°C). It is also quite strong and abrasion resistant.

Sold in a 1 metre pack and available in two diameters.



SIZE(mm)	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
3	1m	WS-5510	\$5.95	\$5.35	\$4.75
6	1m	WS-5511	\$7.95	\$7.15	\$6.35

## CABLE SLEEVING & WRAP

### PVC SPAGHETTI TUBING PACK - 12 PIECE

This sleeving is made from soft PVC. It does not shrink with heat. It is ideal for high-voltage protection of smaller wires, has abrasion resistance or you can bundle several smaller wires inside a length.

- 4 sizes - 1.5, 3.0, 5.0 & 10mm
- Colours - black, red, yellow, white, clear & blue
- All 300mm long
- 85°C rated



Note: colour quantities vary from pack to pack.

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
12 Pieces	WS-5502	\$9.95	\$8.75	\$7.75

### EXPANDABLE PPS SLEEVING

This PPS (Polyphenylene Sulphide) monofilament sleeving is ideal in high temperature environments and offers a lightweight mechanical protection to your cabling. The construction expands up to 3 times to allow easy insertions of cables and reverts back to original diameter for a snug fitment. The open weave design also dissipates heat and doesn't trap moisture.



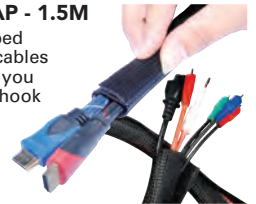
SPECIFICATIONS	ALL MODELS
Material	Polyphenylene Sulphide (PPS) monofilament UL94 V-0
Operating Temperature	-70 to 200°C
Colour	Black
Length	2m

SIZE (mm)	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
3	2m	WH-5584	\$2.50	\$2.21	\$1.95
6	2m	WH-5585	\$3.25	\$2.90	\$2.60
10	2m	WH-5587	\$5.95	\$5.35	\$4.75
15	2m	WH-5588	\$9.95	\$8.75	\$7.95

### BRAIDED HOOK & LOOP LOOM WRAP - 1.5M

A fantastic solution for keeping cables wrapped up and neatly arranged. Wraps around your cables and secures them with hook and loop. When you need to add or remove cables, just undo the hook and loop. Couldn't be easier!

- Hook and loop width: 20mm
- Material: Polyester
- Working temperature: -50° to 150°C
- Melting point: 230°C +/- 5°C



SIZE (mm)	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
32	1.5m	WH-5654	\$14.95	\$13.35	\$11.70
51	1.5m	WH-5656	\$17.95	\$15.95	\$14.35

### SELF-CLOSING BRAIDED WRAP

Protect cabling neat and tidy, and protected from abrasion, wear and tear using this flame resistant self closing wrap. Each 2m length is flexible and lightweight, and the open structure allows it to be easily installed without having to remove connectors or terminals.

SPECIFICATIONS	ALL MODELS
Material	PET Polyethylene Terephthalate
Operating Range	-50°C to +150°C
Melt Point	250°C @ 5°C
Flammability	VW-1
Certificate	RoHS, Halogen Free
Cutting Tool	Hot knife
Colour	Black
Length	2m



SIZE (MM)	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
6	2m	WH-5630	\$6.95	\$6.25	\$5.50
9	2m	WH-5632	\$7.95	\$6.95	\$6.25
13	2m	WH-5634	\$10.95	\$9.85	\$8.75
19	2m	WH-5636	\$12.95	\$11.35	\$10.35

### Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

**Catalogue Department - Jaycar Electronics:**  
catalogue@jaycar.com

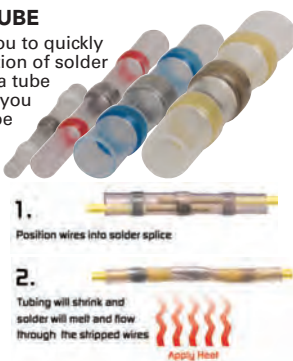
## HEATSHRINK ACCESSORIES

### SOLDER SPLICE HEAT SHRINK TUBE

Solder splice heat shrink tubes allow you to quickly join two cables thanks to the small section of solder in the middle of the tube. Simply slide a tube over the join in two cables and heat as you would any other shrink tube. As the tube shrinks the solder melts to electrically connect the wires resulting in a join which is reliable and well insulated. Available in four sizes approximately 26-40mm in length with 5 pieces per pack. Shrink ratio 2:1.

- Minimum shrink temperature: 85°C
- Starting temperature of solder melt: 140°C
- Operating temperature: -55°C to 125°C
- Minimum full recovery temperature:

DIA. X LENGTH (mm)	PK	COLOUR	CAT.	Qty 1+	Qty 4+	Qty 10+
1.7 x 26	6	Clear	WH-5669	\$4.95	\$4.45	\$4.00
2.7 x 40	5	Red	WH-5670	\$4.95	\$4.45	\$3.90
4.5 x 40	5	Blue	WH-5671	\$4.95	\$4.45	\$3.90
6.0 x 40	5	Yellow	WH-5672	\$4.95	\$4.45	\$3.90



### ASSORTED SOLDER SPLICE HEATSHRINK PACK - 42 PIECES

A handy assorted pack of solder splice heatshrink tubes to join electrical wires quickly and easily and make a good quality join. Each splice has just the right amount of solder to create a secure connection.

Kit includes:

- 12 x White 1.7 x 26mm
- 12 x Red 2.7 x 40mm
- 12 x Blue 4.5 x 40mm
- 6 x Yellow 6.0 x 40mm



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
42	WH-5668	\$34.95	\$31.45	\$27.90

## TAPE

### HEATSHRINK TAPE - BLACK

Ideal for emergency repairs or when you aren't able to use a piece of tubing. It conforms to odd shapes that heatshrink tubing is unable to, and has a low melting point adhesive for easy installation. It also remains flexible at extremely low temperatures. Keep a roll in the toolbox.

- Operating temperature: -40 - 105°C
- Shrink temperature: 125°C



WIDTH (mm)	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
25	5m Roll	WH-5659	\$12.95	\$11.35	\$10.35

## WIRE GLUE

### WIRE GLUE

A soldering iron in a jar. Wire Glue is an electrically conductive adhesive that enables you to make solder-free connections when you don't have a soldering iron handy, or aren't able to apply heat for some reason. Hundreds of hobby, trade and electronics uses. Lead-free, cures overnight.



	CAT.	Qty 1+	Qty 4+	Qty 10+
9ml	NM-2831	\$9.95	\$8.75	\$7.75

## CABLE MANAGEMENT

### RECTANGULAR CABLE DUCT - 1m

Keep your home theatre cables under control and neatly out of the way. Available in two sizes and in convenient 1m lengths, the leads to your wall-mounted plasma or LCD TV will be kept bundled up but easily accessible. The cover can be quickly removed and replaced for maintenance and can be painted to match the colour of your wall.



SIZE (mm)	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
25 x 16	1m	HP-1330	\$6.95	\$6.25	\$5.50
50 x 25	1m	HP-1332	\$9.95	\$8.75	\$7.75

### FLOOR OR WALL CABLE DUCTING

This extruded ducting helps conceal messy cables across doorways, along skirting boards or walls. The ducting is 50.8mm wide and is sold in convenient 1.83m lengths.



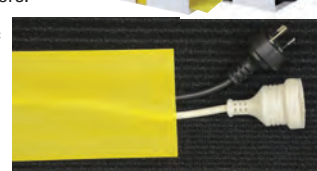
SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
1.83m	HP-1226	\$15.95	\$14.35	\$12.70

### CARPET CABLE COVER - SOLD BY THE ROLL OR METRE

Conceal unsightly cords and eliminate trip hazards with this low profile cord cover. Its 'cut to length' flexibility avoids the constraints of similar cord covers. Just lay it over your cords, and let the 'hook and loop' technology on the underside do its job on your nylon based carpet to secure your cables in place. The channel along the middle allows you to reconfigure your set up without the need to remove any cords. Re-usable over 1,000 times, machine washable and a fraction of the price of other carpet cord covers.

The ideal solution for any office, boardroom, meeting room or public space. Choose from black to keep cable runs discreet, or yellow to prevent people tripping over it.

- 100mm wide
- Sold in handy 5m or 25m dispenser boxes or by the metre



SOLD PER METRE	CAT.	Per Metre	5m+	25m Roll
Black	HP-2000	\$9.95	\$9.39	\$199.00
Yellow	HP-2002	\$9.95	\$9.39	\$199.00
5 METRE ROLLS	CAT.	Qty 1+	Qty 4+	Qty 10+
Black 5m Roll	HP-2004	\$46.95	\$39.95	\$36.95
Yellow 5m Roll	HP-2006	\$46.95	\$39.95	\$36.95

### CARPET CABLE COVER 1.5M

Increase safety when cables need to be laid across floors. It's durable and will significantly reduce the trip-hazard of cables. Secures to carpet with plastic hook & loop.

- Weight: 135g
- Length: 1.5m
- Dimensions: 1500(L)m x 120(W)mm



WIDTH (mm)	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
120	1.5m	HP-1231	\$14.95	\$13.45	\$11.95

### CABLE TAGS

Clip them over your cable so you know what you're unplugging (before you disconnect the wrong thing!). Suits most power and A/V cables. Pack of 8 with writable surface.

- Universal
- Weight: 1.2g
- Dimensions: 34(L) x 16(W) x 3(H)mm
- Material: Thermoplastic Rubber



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
8	HP-1253	\$4.95	\$4.45	\$3.95

### CABLE CLIPS

Universal fit to keep your cables where you want them. Included genuine 3M adhesive tape. Simply stick down, and push your cable into place. Pack of 6.

- Universal
- Genuine 3m tape
- Weight: 5g
- Dimensions: 28(Dia.) x 15(H)mm



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
6	HP-1254	\$4.95	\$4.45	\$3.95

### DESK CABLE ORGANISER

Provides 5-slots for keeping cables from sliding off the table. Great for laptops, charging cables, or anywhere you temporarily connect devices.

- Rubber moulded design
- Weighted base
- Weight: 66g
- Dimensions: 70(W) x 30(D) x 40(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HP-1255	\$4.95	\$4.45	\$3.95

## ✓ CABLE MANAGEMENT (CONTINUED)

### DUNE TUBE WITH APPLICATOR

Keep your cables neat and tidy. They are easily bent for corners and are slit so cables can enter or leave at any point. Simply slip in the cable, insert the applicator and slide away. Easier to use than Spiral Binding; more secure than Loom Tube!

- Made from black flexible plastic
- INCLUDES SPECIAL WIRE SHUTTLE.



DIA.	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
15mm	2.5m	HP-1235	\$9.95	\$8.75	\$7.75
20mm	2.5m	HP-1237	\$11.95	\$10.70	\$9.50
20mm	10m	HP-1239	\$39.95	\$35.90	\$31.90

### SPIRAL BINDING

Keep wiring tidy! Available in 2 sizes and colours and is easily wrapped around bunches of cables to keep them tidy.



DIA.	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
6mm	2.5m	HP-1218	\$6.15	\$5.50	\$4.90
12mm	1.5m	HP-1219	\$6.15	\$5.50	\$4.90
6mm	2.5m	HP-1220	\$6.15	\$5.50	\$4.90
12mm	1.5m	HP-1222	\$6.15	\$5.50	\$4.90

### ROUND DESK GROMMET

The perfect way to easily and neatly store your cables. It is ideal for installation in desks, workstation, telephones cabinets or entertainment unit. Simply drill or cut a 60mm hole through the surface & insert the grommet into the hole.

- Dimensions: 60mm (diameter) / Black in colour



DIA.	CAT.	Qty 1+	Qty 4+	Qty 10+
60mm (diameter)	HP-1228	\$9.95	\$8.75	\$7.75

### LOOM TUBES

Tidy up the cables behind your PC or audio equipment, secure cabling in your car. The Loom Tube will keep wiring in place and suits many types of applications. The tube has a slit so that cables can enter/leave at any point along its length. Made from black flexible PVC.

- Three diameters available: 7, 10 or 19mm
- Available in either 2m or 10m lengths - just cut to suit
- Good abrasion resistance



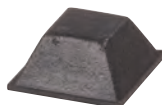
DIA.	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
7mm	2m	HP-1221	\$3.20	\$2.83	\$2.45
10mm	2m	HP-1224	\$3.80	\$3.30	\$2.95
19mm	2m	HP-1227	\$4.95	\$4.45	\$3.90
7mm	10m	HP-1223	\$14.95	\$13.35	\$11.70
10mm	10m	HP-1225	\$15.95	\$14.35	\$12.70
19mm	10m	HP-1229	\$19.95	\$17.95	\$15.95
25mm	2.0m	HP-1801	\$5.95	\$5.35	\$4.75
25mm	10m	HP-1804	\$19.95	\$17.95	\$15.95
40mm	2.0m	HP-1807	\$7.95	\$7.15	\$6.35
48mm	2.0m	HP-1810	\$8.95	\$8.05	\$7.15

## ✓ RUBBER FEET

### SMALL STICK ON

Dimensions: 12 x 12mm

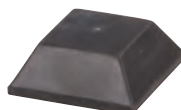
- Height 6mm
- Moulded in oil resistant synthetic rubber



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
4	HP-0815	\$2.50	\$2.20	\$1.95
20	HP-0816	\$7.95	\$6.95	\$6.25

### LARGE STICK ON

- Dimensions: 20 x 20mm
- Height 8mm
- Moulded in oil resistant synthetic rubber



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
4	HP-0825	\$3.95	\$3.45	\$3.15
20	HP-0822	\$9.95	\$8.75	\$7.75

### SCREW ON EQUIPMENT FEET

- Silver in colour
- Screw on
- Pack of 4



DIA.	CAT.	Qty 1+	Qty 4+	Qty 10+
30	HP-0830	\$6.95	\$6.25	\$5.50
50	HP-0832	\$8.95	\$7.95	\$6.95

### SCREW FIXING RUBBER FEET

Requires 3mm screw and nut.

- 11mm dia. x 7.5mm high
- Moulded in oil resistant synthetic rubber



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
8	HP-0800	\$4.50	\$3.95	\$3.60

## ✓ RUBBER GROMMETS

### RUBBER GROMMETS

Suitable for use with chassis up to 16 gauge/1.5mm.

- Moulded in oil resistant synthetic rubber - black colour



PACK	CABLE DIA	CHASSIS HOLE	CAT.	Qty 1+	Qty 4+	Qty 10+
8	6mm	9.5mm	HP-0702	\$3.95	\$3.45	\$3.15
8	9.5mm	12.7mm	HP-0704	\$4.65	\$4.15	\$3.60

## ✓ CABLE GLANDS

### IP68 NICKEL PLATED BRASS CABLE GLANDS

These nickel-plated brass cable glands are certified to IP68 and provide superior grip and sealing. They are totally protected and O-ring sealed against the ingress of dust, moisture and water to a depth of one metre. The unique design speeds installation and eliminates the need to disassemble the gland before fitting. A self-adjusting cable seal allows the glands to be used on a wide range of cable sizes and minimises inventory holdings. These glands are supplied complete with seals and locknuts. 5 sizes are available.



PACK	CABLE SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
2	3 to 6.5mm	HP-0744	\$7.45	\$6.50	\$5.75
2	4 to 8mm	HP-0745	\$7.95	\$6.95	\$6.25
2	5 to 10mm	HP-0746	\$8.95	\$7.95	\$6.95
2	6 to 12mm	HP-0747	\$9.95	\$8.75	\$7.75
2	10 to 14mm	HP-0748	\$9.95	\$8.75	\$7.75

### IP68 WATERPROOF CABLE GLANDS

These unique cable clamps incorporate a unique sealing mechanism which works on the camera shutter principle. Simply mount the clamp, insert the cable through and tighten up. There is no need to disassemble the clamp prior to installation. These clamps are rated to IP68. This is the highest rating possible. They are totally dust tight and protected against submersion in water.

- Trapezoidal thread for quick high torque tightening
- No throwaway "O" rings
- Long metric thread
- Superior strain relief
- UL Approved NYLON 94V-2



PACK	CABLE DIA	THREAD	CAT.	Qty 1+	Qty 4+	Qty 10+
2	3-6.5mm	EP-7	HP-0720	\$4.95	\$4.45	\$3.90
2	4-8mm	EP-9	HP-0724	\$5.45	\$4.90	\$4.30
2	5-10mm	EP-11	HP-0727	\$5.95	\$5.25	\$4.75
2	6-12mm	EP-13.5	HP-0732	\$6.45	\$5.75	\$4.95
2	10-14mm	EP-16	HP-0736	\$6.95	\$6.25	\$5.50
2	13-18mm	EP-21	HP-0740	\$7.95	\$6.95	\$6.25

### CORDGRIP CLAMPS

HP-0716 7.4mm - 8.2mm DIAMETER (3 wire mains).

- Panel cutout 14mm
- Black nylon

HP-0718 6.2mm - 7.4mm DIAMETER

- Panel cutout 11.5mm



PACK	DIA	CAT.	Qty 1+	Qty 4+	Qty 10+
4	7.4mm - 8.2mm	HP-0716	\$1.95	\$1.75	\$1.55
4	6.2mm - 7.4mm	HP-0718	\$1.95	\$1.75	\$1.55



## ✓ CABLE TIES

### METAL CABLE TIES

Made from 316 marine grade stainless steel for the ultimate in durability. Self-locking head design, suitable for virtually any use, boating, outdoors, underground, anywhere a plastic cable tie won't cut it. Sold each.



LENGTH	WIDTH	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	4.6mm	HP-1182	\$3.95	\$3.55	\$3.15
290mm	4.6mm	HP-1184	\$4.95	\$4.45	\$3.95
200mm	7.9mm	HP-1186	\$5.95	\$5.35	\$4.75
520mm	7.9mm	HP-1188	\$9.95	\$8.95	\$7.95

### PLASTIC CABLE TIES

- UV resistant black nylon
- Safe edges

LENGTH	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
100mm	20	HP-1200	\$1.85	\$1.65	\$1.45
150mm	15	HP-1201	\$2.25	\$1.95	\$1.80
200mm	15	HP-1202	\$2.50	\$2.20	\$1.95
300mm	15	HP-1245	\$2.95	\$2.60	\$2.30
500mm	15	HP-1248	\$5.95	\$5.25	\$4.75
605mm	15	HP-1249	\$6.95	\$6.25	\$5.50
100mm	100	HP-1203	\$4.95	\$4.45	\$3.90
150mm	100	HP-1204	\$7.95	\$6.95	\$6.25
200mm	100	HP-1205	\$10.95	\$9.75	\$8.75
300mm	100	HP-1246	\$12.95	\$11.35	\$10.35
100mm	500	HP-1211	\$17.95	\$15.95	\$14.35
150mm	500	HP-1212	\$29.95	\$26.95	\$23.95
200mm	500	HP-1213	\$39.95	\$35.90	\$31.90
300mm	500	HP-1247	\$45.00	\$40.45	\$35.95

### EXTRA LONG MIXED CABLE TIE SET

This handy cable tie set contains 70 black cable ties of various lengths up to 500mm.

- 10 pcs 500(L) x 10(W)mm
- 10 pcs 510(L) x 8(W)mm
- 20 pcs 400(L) x 5(W)mm
- 30 pcs 300(L) x 4(W)mm



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
25	HP-1209	\$18.95	\$16.95	\$14.95

### COLOURED CABLE TIES

Identify wiring looms with different coloured cable ties. Pack includes 25pcs each of red, yellow, green, blue and black.

- Total 125 cable ties
- Length 100mm



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
25	HP-1196	\$9.95	\$8.75	\$7.75

### MIXED HOOK & LOOP CABLE TIES

Keep your cables neat and tidy. Packet of 16 hook & loop cable ties in assorted sizes from 125 to 180mm.



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
16	HP-1232	\$9.95	\$8.75	\$7.75

### 100MM LABEL CABLE TIES

Ideal for large or complex wiring looms, these allow you to label cable bundles for identification later to make tracing or fault finding easy. Easily marked with permanent marker or self-adhesive labels.



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
20	HP-1244	\$3.50	\$3.15	\$2.75

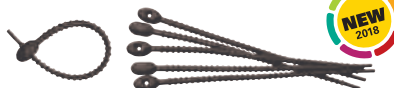
### RELEASEABLE CABLE TIE PACK

Releaseable cable ties are perfect for temporarily securing cables or for jobs where you need to periodically change cables. This handy pack contains 10 pieces at lengths of 125, 200, and 300mm. The release lever is located below the head of the cable tie making it easy to access but unlikely to be released accidentally. The ties are made from UV resistant black nylon and have safe edges to prevent cuts.

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
10 Pieces	HP-1217	\$6.95	\$6.25	\$5.50

### REUSABLE FLEXIBLE BLACK CABLE TIES 8 PACK

Reusable cable ties used to temporarily mount LED strip lights in place on poles, tree branches, etc.

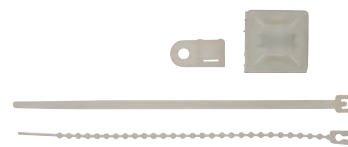


PACK	CAT.	Qty 1+	Qty 4+	Qty 10
Reusable 8	HP-1234	\$6.95	\$6.25	\$5.55

### CABLE TIE TIDY KIT

Consists of:

- 30 x 120mm cable ties,
- 20 x 120mm reusable cable ties,
- 10 x self adhesive cable tie mounts,
- 20 x saddle type cable tie mounts.



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
80 Pieces	HP-1198	\$9.95	\$8.75	\$7.75

### CABLE TIE BOX - 400 PIECES

Let's face it, the mixed box of cable ties in all the colours of the rainbow is fine, however most of the time you only use about 2-3 different sizes and the black colour because of its UV stability. This is your box. This kit consists of: 100 pcs x 200mm, 100 pcs x 150mm, 200 pcs x 100mm. All in a see through flat storage case that makes access to the ties easy. The box even has some compartment dividers included so that it becomes a parts storage box when all of the ties have been used up.



- Box dimensions: 250(W) x 180(D) x 40(H)mm

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
400 Pieces	HP-1216	\$19.95	\$17.70	\$15.70

### CABLE TIE GUN

Once you have wrapped the tie around the cable you simply slide the tail into the gun and pull the trigger. This will tighten the tie and cut off the excess to produce a neat and professional finish.

- Tension adjustment for different ties



CAT.	Qty 1+	Qty 4+	Qty 10+
TH-2600	\$23.95	\$21.35	\$18.95

### HOOK & LOOP CABLE TIES

Tidy up behind the TV or audio equipment with these re-usable hook & loop cable ties. Each tie is 140mm in length.



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
5	HP-1210	\$4.95	\$4.45	\$3.90

## ✓ CABLE TIE MOUNTS

### ADHESIVE CABLE TIE MOUNTS

These are used in conjunction with our cable ties. They simply stick to the surface, then the cable tie is looped through and around the cables.

- 21mm square

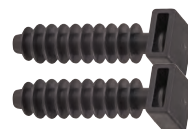


PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
10	HP-1195	\$4.50	\$3.95	\$3.60

### CONCRETE CABLE TIE MOUNTS

Use these cable tie mounts in runs along walls and ceilings made of brick or concrete.

- UL 94V-2 approved Nylon
- Hole required: Approx. 7mm dia x 37mm deep



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
20	HP-0795	\$5.50	\$4.90	\$4.30
100	HP-0796	\$23.50	\$20.95	\$18.70



## FASTENERS & SCREWS

### METRIC NYLON FASTENERS

- Precision moulded from white nylon
- Fully insulated
- Suitable for high temperature work
- Corrosion free and won't shake loose
- Ideal for transistor and heatsink use
- Supplied in polybag



### M3 NYLON SCREWS, NUTS & WASHERS

SIZE	TYPE	PK	CAT.	Qty 1+	Qty 4+	Qty 10+
M3 x 12mm	Screws, Phillips Drive	10	HP-0140	\$2.95	\$2.60	\$2.30
M3 x 25mm	Screws, Phillips Drive	10	HP-0142	\$3.50	\$3.15	\$2.75
M3 Nuts	Hex	10	HP-0146	\$3.00	\$2.60	\$2.30
M3 Nuts	Hex with Washer	25	HP-0150	\$6.50	\$5.75	\$4.95
M3 Washer	Flat	10	HP-0148	\$2.50	\$2.20	\$1.95

### M4 NYLON SCREWS, NUTS & WASHERS

SIZE	TYPE	PK	CAT.	Qty 1+	Qty 4+	Qty 10+
M4 x 10mm	Screws, Phillips Drive	25	HP-0160	\$7.50	\$6.75	\$5.95
M4 x 16mm	Screws, Phillips Drive	25	HP-0162	\$8.50	\$7.50	\$6.75
M4 Nuts	Hex	25	HP-0168	\$7.00	\$6.25	\$5.50
M4 Washers	Flat 10mmOD, 4.2mm ID	25	HP-0166	\$5.00	\$4.45	\$3.95

### WOODSCREWS - PHILLIPS HEAD

- Ideal for mounting speakers
- Black finish
- No.6 size suitable for tweeters, midrange and crossovers
- No.10 size suitable for Woofers



SIZE	TYPE	PK	CAT.	Qty 1+	Qty 4+	Qty 10+
No.6 x 15mm	Round Head (Tweeters)	20	HP-0620	\$4.95	\$4.45	\$3.90
No.6 x 15mm	Countersunk	20	HP-0626	\$4.95	\$4.45	\$3.90
No.8 x 25mm	Countersunk	20	HP-0625	\$5.95	\$5.25	\$4.75
No.10 x 30mm	Round Head (Woofers)	20	HP-0624	\$5.95	\$5.25	\$4.75
No.10 x 30mm	Countersunk	20	HP-0628	\$5.95	\$5.25	\$4.75

### SELF-TAPPING SCREWS

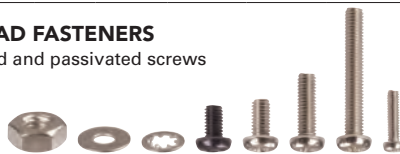
- Nickel plated Steel



SIZE	TYPE	PK	CAT.	Qty 1+	Qty 4+	Qty 10+
No.4 x 6mm	Phillips Head	25	HP-0550	\$3.00	\$2.60	\$2.30
No.4 x 9mm	Phillips Head	25	HP-0565	\$3.00	\$2.60	\$2.30
No.4 x 12mm	Phillips Head	25	HP-0564	\$3.50	\$3.15	\$2.75
No.8 x 12mm	Phillips Head	25	HP-0558	\$4.00	\$3.60	\$3.15

### METRIC METAL THREAD FASTENERS

- Nickel or Cadmium Plated and passivated screws
- Supplied in polybag



### M2 SCREWS

SIZE	TYPE	PK	CAT.	Qty 1+	Qty 4+	Qty 10+
M2 x 8mm	Screw, Poz Drive	4	HP-0390	\$1.50	\$1.35	\$1.20

### M3 EQUIPMENT SCREWS

\*Black japanned screws used holding top/side panels on VCR, DVD, Amplifiers, etc.

SIZE	TYPE	PK	CAT.	Qty 1+	Qty 4+	Qty 10+
M3 x 5mm	Screw, Phillips, Black	25	HP-0440	\$2.30	\$2.03	\$1.80
M3 x 5mm	Screw, Phillips, Black	200	HP-0441	\$6.00	\$5.25	\$4.75

### M3 SCREWS, NUTS & WASHERS

SIZE	TYPE	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
M3 x 6mm	Screw, Phillips	25	HP-0400	\$2.50	\$2.20	\$1.95
M3 x 6mm	Screw, Phillips	200	HP-0401	\$6.50	\$5.75	\$4.95
M3 x 10mm	Screw, Phillips	25	HP-0403	\$3.00	\$2.60	\$2.30
M3 x 10mm	Screw, Phillips	200	HP-0404	\$7.50	\$6.75	\$5.95
M3 x 15mm	Screw, Phillips	25	HP-0406	\$3.50	\$3.15	\$2.75
M3 x 15mm	Screw, Phillips	200	HP-0407	\$8.50	\$7.50	\$6.75
M3 x 20mm	Screw, Phillips	25	HP-0410	\$3.50	\$3.15	\$2.75
M3 x 25mm	Screw, Phillips	25	HP-0414	\$3.50	\$3.15	\$2.75
M3 x 32mm	Screw, Phillips	25	HP-0418	\$4.00	\$3.60	\$3.15
M3 Nuts	Hex	25	HP-0425	\$2.95	\$2.60	\$2.30
M3 Nuts	Hex	200	HP-0426	\$9.95	\$8.75	\$7.75
M3 Washers	Flat	25	HP-0430	\$3.00	\$2.60	\$2.30
M3 Washers	Flat	200	HP-0431	\$7.95	\$6.95	\$6.25
M3 Washers	Shakeproof	25	HP-0433	\$3.50	\$3.15	\$2.75
M3 Washers	Spring	25	HP-0436	\$3.00	\$2.60	\$2.30

### M4 SCREWS, NUTS & WASHERS

SIZE	TYPE	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
M4 x 10mm	Screw, Phillips	25	HP-0450	\$3.50	\$3.15	\$2.75
M4 x 10mm	Screw, Phillips	200	HP-0451	\$9.95	\$8.95	\$7.95
M4 x 15mm	Screw, Phillips	25	HP-0453	\$4.50	\$3.95	\$3.60
M4 Nuts	Hex	25	HP-0462	\$3.50	\$3.15	\$2.75
M4 Washers	Flat	25	HP-0465	\$3.50	\$3.15	\$2.75
M4 Washers	Shakeproof	25	HP-0468	\$4.00	\$3.60	\$3.15

### M6 RACK SCREWS, NUTS & WASHERS

Suitable for mounting rack style enclosures into rack units.



SIZE	TYPE	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
M6 x 16mm	Screw, Poz Drive, Black	12	HP-0300	\$4.95	\$4.45	\$3.90
M6 Nuts	Captive Nuts	12	HP-0310	\$7.95	\$6.95	\$6.25
M6 Washer	Flat Washer	12	HP-0322	\$3.50	\$3.15	\$2.75

## NUTS & SPRINGS

### POTENTIOMETER NUTS

Packet of 12 potentiometer nuts and washers.



SIZE	THREAD	PACK	CAT.	Qty 1+	Qty 10+	Qty 50+
24mm	3/8" 32THD	12	RP-3500	\$3.50	\$2.75	\$2.45
16mm	Metric	12	RP-7500	\$3.50	\$2.75	\$2.45

### 200 PIECE SPRING ASSORTMENT

This set contains approximately 200 springs, with 20 different types, compression and tension. They range from 10mm long to 70mm long.

- Sizes for all are given on the lid
- Supplied in a plastic storage case

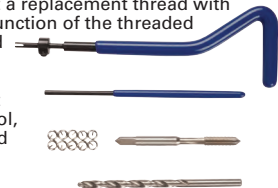


PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
200 Pieces	HP-0638	\$19.95	\$17.95	\$15.95

### THREAD REPAIR KITS (SMALL METRIC) M4 - M6

These products enable you to drill out a stripped or otherwise damaged thread in a blind hole. You can then insert a replacement thread with the coiled thread inserts and regain full function of the threaded hole, often giving a much stronger thread than the original one. This also works when a damaged stud or screw shaft has been removed. The basic thread repair kit includes: Drill bit, thread tap, insertion tool, tag punch and 10 inserts of the nominated thread size.

Three versions available.



TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
For M4	HP-1602	\$29.95	\$26.90	\$23.70
For M5	HP-1604	\$29.95	\$26.90	\$23.70
For M6	HP-1606	\$29.95	\$26.90	\$23.70

## SPACERS

### UNTAPPED NYLON PCB SPACERS

Superb range of spacers. Fixing is by size 6 or 8 self tapping screws. The hex centre section can be gripped to prevent rotation while fixing.

- OD 8.2mm



LENGTH	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
6mm	5	HP-0980	\$2.75	\$2.45	\$2.15
12mm	5	HP-0982	\$2.75	\$2.45	\$2.15
19mm	4	HP-0984	\$2.75	\$2.45	\$2.15
25mm	4	HP-0986	\$2.95	\$2.60	\$2.30
32mm	4	HP-0988	\$3.50	\$3.15	\$2.75
38mm	4	HP-0990	\$3.95	\$3.45	\$3.15

### UNTAPPED NYLON SPACERS

- Untapped
- ID 4.1mm. OD 6.4mm



LENGTH	DIAMETER	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
6mm	6mm	25	HP-0930	\$6.95	\$6.25	\$5.50
10mm	6mm	25	HP-0934	\$7.95	\$6.95	\$6.25

## ✓ SPACERS (CONTINUED)

### 3MM TAPPED NYLON SPACERS

These spacers are tapped all the way through for a 3mm screw.

- OD 6mm



LENGTH	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
6.3mm	25	HP-0920	\$8.95	\$7.95	\$6.95
9mm	25	HP-0922	\$9.95	\$8.95	\$7.95
12mm	25	HP-0924	\$9.95	\$8.75	\$7.75
15mm	25	HP-0926	\$11.95	\$10.70	\$9.50

### UNTAPPED METAL SPACERS

- Nickel plated steel
- Untapped
- ID: 3.4mm OD 4.7mm



LENGTH	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
6mm	8	HP-0860	\$3.65	\$3.15	\$2.90
9mm	8	HP-0862	\$3.95	\$3.45	\$3.15
12mm	6	HP-0864	\$4.65	\$4.15	\$3.60
25mm	4	HP-0866	\$4.95	\$4.45	\$3.90

### 3MM TAPPED METAL SPACERS

- Nickel plated brass
- 3mm standard metric thread



LENGTH	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
10mm	8	HP-0900	\$3.95	\$3.45	\$3.15
10mm	100	HP-0901	\$29.50	\$26.55	\$23.60
15mm	8	HP-0904	\$4.95	\$4.45	\$3.90
25mm	8	HP-0907	\$5.95	\$5.25	\$4.75

## ✓ PCB STANDOFFS

### ADHESIVE PCB STANDOFFS

The self adhesive base sticks directly to the chassis.

- Requires 4mm PCB hole
- Adhesive pads 18mm square
- Nylon



HEIGHT	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
6.35mm	25	HP-0760	\$11.95	\$10.70	\$9.50
12.7mm	25	HP-0762	\$13.95	\$12.35	\$10.95

### SCREW MOUNT PCB SUPPORTS

These supports have a 2.5mm hole for securing to chassis with a screw, use 3 x 10mm or a self tapper.

- Requires 4mm PCB hole
- Nylon



HEIGHT	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
10mm	25	HP-0764	\$7.95	\$6.95	\$6.25
20mm	25	HP-0766	\$9.95	\$8.75	\$7.75

### FLUSH MOUNT PCB SUPPORTS

These are virtually flush mount on the underside of the chassis.

- PCB hole 4mm
- Chassis hole 5.5mm
- Chassis thickness 0.8-1.2mm
- Nylon

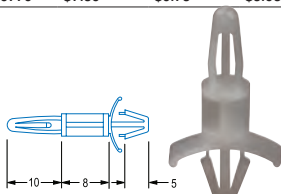


HEIGHT	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
6.35mm	25	HP-0774	\$6.95	\$6.25	\$5.50
10mm	25	HP-0776	\$7.50	\$6.75	\$5.95

### SCREWLESS PCB STANDOFF

- Nylon

Saves using nuts, bolts and spacers. Size 8mm. Requires 3mm hole each end.



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
8	HP-0770	\$2.50	\$2.20	\$1.95

## METAL RIGHT ANGLE STANDOFFS

Threaded M3.5 standoffs, right angle.



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
8	HP-0872	\$4.95	\$4.45	\$3.90

## ✓ CABLE CLIPS / CLAMPS

### ADHESIVE CABLE / BUNDLE MOUNTS

These have an adhesive base 25 x 18mm and cable tie that clips into the base to retain individual cables, or bundles of wiring. The maximum cable bundle diameter accommodated is 17mm.

- The base also has a 3mm hole for a screw mount if required



PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
10	HP-1190	\$6.95	\$6.25	\$5.50

### ADHESIVE CABLE CLIPS

The easy way to secure cables to walls, cabinets etc. Simply peel off adhesive cover and slip cable in.

- Please note all sizes are in mm
- Nylon



CAT.	A	B	C	D	E
HP-0782	11.7	5.9	15.9	2.5	5.2
HP-0784	13.4	8.2	16.0	4.7	8.0
HP-0786	19.0	11.9	19.0	7.9	11.8

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
25	HP-0782	\$9.95	\$8.95	\$7.95
25	HP-0784	\$10.95	\$9.85	\$8.75
25	HP-0786	\$11.50	\$10.35	\$8.95

### CABLE CLIPS

These clips are made using a high-density polyethylene plastic material and galvanised high carbon steel nails. Available in packets of 25 and are priced up to 50% less than others.

- 4 sizes available



#### 3 X 5MM

Accepts cables up to 3mm high by 5mm wide. Suits the following:  
WB-1706/WB-1708 speaker cable & 6 core flat telephone cable.

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
25	HP-0680	\$2.45	\$2.15	\$1.95

#### 5 X 8MM EXPANDABLE

Suits round cables with 5 x 8mm diameter - including 4 core alarm cable, 75Ω thin coax and 50Ω thin coax.

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
25	HP-0682	\$2.75	\$2.45	\$2.15

#### 5 X 7MM

Accepts cable up to 5mm high by 7mm wide. Suits the following:  
WB-1706/WB-1708 speaker cable & 6 core flat telephone cable

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
25	HP-0692	\$2.95	\$2.60	\$2.30

#### 7 - 10MM EXPANDABLE

Suitable for round cable 7-10mm diameter - including 6 core alarm cable, air spaced coax and Belden coax.

PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
25	HP-0694	\$3.45	\$3.05	\$2.75

### 'P' TYPE CABLE CLAMPS

- Nylon



SIZE	PACK	CAT.	Qty 1+	Qty 4+	Qty 10+
For 5mm cable	6	HP-0752	\$1.95	\$1.75	\$1.55
For 7mm cable	6	HP-0754	\$2.45	\$2.15	\$1.95
For 10mm cable	6	HP-0756	\$2.95	\$2.60	\$2.30





# Workbench Equipment



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## Select Your Model: Gas Soldering Irons



See page 212 for our Butane Gas



	TS-1111	TS-1305	TS-1310	TS-1320	TS-1112	TS-1113	TS-1318	TS-1328
Soldering Iron	•	•	•	•				
Soldering Iron Kit					•	•	•	•
Temp - Soldering Iron		450°C	580°C	580°C		500°C	580°C	580°C
Temp - Hot Blow						650°C		
Temp - Torch						1300°C		1300°C
Power (Watts)		10W/60W	15W/75W	25W/125W			15W/75W	25W/125W
Spare Catalyst	•							
Soldering Tips - Kit					•	•	•	•
Hot Air Blow Tip			•	•		•	•	•
Hot Air Deflector						•	•	•
Hot Knife Tip			•	•			•	•
Rope Cutter Tip			•		•			
Flame Tip			•		•		•	
1.0mm Chisel Tip			•	•				
1.0mm Conical Tip	•	•						
2.4mm Double Flat Tip							•	•
2.4mm Chisel Tip		•	•	•				
3.0mm Flat Tip						•		

## ✓ GAS SOLDERING IRONS

### LOW COST GAS SOLDERING IRON

A low cost alternative, this butane gas soldering iron features adjustable tip temperature and a fold-out stand. Remove the soldering tip and you have a flame torch for heatshrink etc. Great for soldering, cutting plastic, or heat shrinking plastic.

- Dimensions: 210(L) x 20(Dia)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron - Gas	TS-1111	\$26.95	\$23.95	\$21.35
Spare Catalyst	TS-1104	\$14.95	\$13.35	\$11.70
1mm Conical Tip	TS-1105	\$4.95	\$4.45	\$3.90
Butane Gas - 150g	NA-1020	\$4.95	\$4.45	\$3.95

### GAS SOLDERING IRON / TORCH KIT

Everything you need to solder, silver solder, braze, heatshrink, strip paint etc. The iron is refillable with standard butane gas and has an on/off switch and a built-in stand for safety. Extra soldering, torch and cutting tips are included, all housed in a moulded storage case.

Replacement gas:  
NA-1020.

- 3 soldering tips,
- 1 rope cutter,
- 1 torch attachment
- 178mm long



	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Iron/Torch Gas	TS-1112	\$39.95	\$35.90	\$31.90
Butane Gas - 150g	NA-1020	\$4.95	\$4.45	\$3.95

## Gas Soldering Irons - Portasol:

A leading brand recognized worldwide. Portasol® products are designed and manufactured in Ireland, to the highest quality standards. Since commencing operation in 1983, they have forged their way into the market with some of the most rugged & reliable gas powered soldering & heating tools in the world. They utilize catalytic combustion (flame tips excluded), which converts the gas flame into infrared radiation. It is a safe, flameless way of heating the tips evenly and continuously. They all use standard butane gas, and have a variety of tips available to support a wide range of applications.

### PORTASOL® TECHNIC GAS SOLDERING IRON

The Portasol® Technic combines compact power, and convenient reliability, making it one of the most versatile gas soldering irons available. It offers a run time of around 60 minutes, and tip temperature is adjustable up to 450°C. With equivalent electrical power of between 10 and 60 Watts, it is ready to tackle just about anything. The protective end cap features a built in flint type igniter, and if the gas is left on, it will turn it off when replaced. If a compact, versatile and reliable gas iron is what you're after, then the Portasol® Technic is for you.



Includes Tip Cover.



WARRANTY

SPECIFICATIONS	TS-1305
Operating Time	60 min (approx).
Refill Time	10 sec (approx).
Ignition	Flint igniter in end cap.
Dimensions	170(L) x 19(Dia)mm.
Weight	60g without gas

CAT.	Qty 1+	Qty 3+	Qty 6+
TS-1305	\$59.95	\$53.95	\$47.90

TIPS TO SUIT	CAT.	Qty 1+
1.0mm Conical	TS-1306	\$23.95
2.4mm Chisel	TS-1307	\$23.95
4.8mm Chisel	TS-1308	\$23.95

### Related Product: BUTANE GAS

Use it for filling up your gas soldering iron, flame torches, cigarette lighters, etc. Includes five different adaptors, which cover most different gas valves. Includes filling instructions.

- Enough gas for many many refills
- Cannot be sent by post



5 adaptors supplied.



CAT.	Qty 1+	Qty 4+	Qty 10+
NA-1020	\$4.95	\$4.45	\$3.95

### Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.

### PORTASOL® PRO PIEZO GAS SOLDERING IRON

The Portasol® Pro Piezo is a powerful gas soldering iron featuring an adjustable temperature control allowing soldering tip temperatures up to 580°C. With equivalent electrical power of between 15 and 75 Watts, there is little that's not possible with this beauty. It incorporates a viewing window at the end of the gas tank, to keep an eye on the fuel level. The fuel tank fills in around 20 seconds, and will provide approximately 45 minutes of run time. Ignition is via the built in Piezo crystal mechanism, and the end cap provides safety gas shut off when replaced. The Portasol® Pro Piezo is a dream to use, and will not let you down.

- 2.4mm double flat tip supplied



Includes Tip Cover.



WARRANTY

SPECIFICATIONS	TS-1310
Operating Time	45 min (approx).
Refill Time	20 sec (approx).
Ignition	Internal Piezo crystal ignitor
Dimensions	178(L) x 22(Dia)mm
Weight	75g without gas.

CAT.	Qty 1+	Qty 3+	Qty 6+
TS-1310	\$99.95	\$89.95	\$79.95

TIPS TO SUIT	CAT.	Qty 1+
1.0mm Chisel	TS-1311	\$23.95
2.4mm Chisel	TS-1312	\$23.95
4.8mm Chisel	TS-1313	\$23.95
Hot Air Blow	TS-1314	\$23.95
Hot Knife	TS-1315	\$23.95

### PORTASOL® PRO PIEZO GAS SOLDERING TOOL KIT

This kit contains a Portasol® Pro Piezo Gas Soldering Iron and the following.

- Quality storage case
- 2.4mm double flat tip (TS-1312)
- Hot knife tip (TS-1315)
- Flame tip (TS-1316)
- Cleaning sponge and tray
- Hot air blow (TS-1314)
- Hot air deflector



WARRANTY



CAT.	Qty 1+	Qty 3+	Qty 6+
TS-1318	\$129.00	\$115.95	\$102.95



Fantastic warranty on these quality products.



WARRANTY

### PORTASOL® SUPER PRO GAS SOLDERING IRON

The Portasol® Super Pro is the big brother of all irons in the range. It features adjustable tip temperature up to 580°C, with equivalent electrical power of between 25 and 125W! 125W may seem somewhat excessive to some. You don't need a V8 to drive around town, but it's nice to know that the power is there when it's needed isn't it? Ignition is achieved with the internal Piezo crystal mechanism, and run time is around 2 hours on a 30 second refill. The stainless steel finished gas tank features a viewing window to keep an eye on fuel level, & the protective end cap also acts as a safety cut off for the gas valve control when replaced. With the various tips available & huge power at hand, no job is a match for the Portasol® Super Pro.

- 2.4mm tip supplied



Includes Tip Cover.



WARRANTY

SPECIFICATIONS	TS-1320
Operating Time	120 min (approx).
Refill Time	30 sec (approx).
Ignition	Internal Piezo crystal ignitor
Dimensions	234(L) x 25(Dia)mm.
Weight	135g without gas

CAT.	Qty 1+	Qty 3+	Qty 6+
TS-1320	\$119.00	\$106.95	\$94.95

TIPS TO SUIT	CAT.	Qty 1+
1.0mm Chisel	TS-1321	\$24.95
2.4mm Chisel	TS-1322	\$24.95
4.8mm Chisel	TS-1323	\$24.95
Hot Air Blow	TS-1324	\$24.95
Hot Knife	TS-1325	\$24.95

### PORTASOL® SUPER PRO GAS SOLDERING TOOL KIT

Features 120 minute run time, 30 second fill, maximum 580°C temperature and 40 second heat up. This kit contains a Portasol® Super Pro Gas Soldering Iron and the following.

- Quality storage case
- Hot Air Blow
- Cleaning sponge and tray.
- Hot knife tip (TS-1325)
- 2.4mm double flat tip (TS-1322)
- Hot air deflector
- 4.8mm flat tip (TS-1323)



WARRANTY



CAT.	Qty 1+	Qty 3+	Qty 6+
TS-1328	\$159.00	\$142.95	\$126.95

## ✓ GAS SOLDERING IRONS - PORTASOL (CONTINUED)

### PRO GAS SOLDERING TOOL KIT

A sturdy, portable, self-igniting butane powered gas soldering iron tool kit with 3 tips. Produces a 1300°C adjustable flame for low end brazing, tin/plastic melting, automotive repair work, welding and of course heat shrinking. Supplied with 3 interchangeable metal tips for PCB work. A handy retractable stand as well as being supplied in a plastic carry case that includes a cleaning sponge, extra tips, a deflector and a cap for the soldering iron.

SPECIFICATIONS	TS-1113
Operating Time	80-100 min (on minimal flame)
Gas Capacity	20ml
Ignition	Internal Piezo Crystal igniter
Weight	115g without gas
Temperature Of Torch	Up to 1300°C
Temperature Of Hot Blow	Up to 650°C
Temperature Of Soldering	Up to 500°C
Case Dimensions	236(L) x 32(W) x 37(D)mm



WARRANTY



Butane gas required - use NA-1020 on page 212

	CAT.	Qty 1+	Qty 3+	Qty 6+
Pro Gas Soldering Tool Kit	TS-1113	\$69.95	\$62.95	\$55.95
3mm Flat Tip	TS-1116	\$4.95	\$4.45	\$3.90
4mm Chisel	TS-1117	\$4.95	\$4.45	\$3.90
Blower Tip	TS-1118	\$12.95	\$11.35	\$10.35
Butane Gas - 150g	NA-1020	\$4.95	\$4.45	\$3.95

## ✓ GAS TORCHES & COMBOS

### PENCIL BUTANE TORCH

Pocket sized gas torch for heatshrinking, soldering etc and uses standard butane gas. Adjustable flame, all metal construction.

- Dimensions: 205(L) x 13(Dia)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TS-1667	\$11.95	\$10.70	\$9.50

### COMPACT POCKET SIZE GAS BLOWTORCH

At only 95mm high, this product is amazing. It is a fully self-contained Butane 1300°C portable blow torch. It has simple press button Piezo ignition, flame control and safety lock. The unit can be recharged with a suitable Butane refill (such as the NA-1020). It will take 7g of gas which will give 30 minutes of use at mid setting. Has protective burner cap.

Ideal for:

- Low temp silver soldering
- Heat Shrinking
- Soft soldering ("sweating")
- Hobby use
- Food preparation etc

Dimensions:

95(H) x 55(L) x 26(W)mm, weight 45g (dry)  
For suitable Butane Gas use NA-1020.  
For Silver Solder use NS-3045.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1610	\$24.95	\$22.45	\$19.95

### 3 IN 1 HEAT BLOWER & SOLDERING IRON

A handy 3-in-1 unit with flame or flameless heat blower and soldering iron function. Great for general heating, drying, melting, soldering, heat shrinking etc. It also features adjustment for temperature control, Piezo ignition, child resistant latch and uses butane gas. The tip has a sturdy cap for when not in use. Ideal for hobbyists and professionals alike. Spare Tip available: TH-1603 Butane gas required - use NA-1020.



SPECIFICATIONS	TH-1604
Burning Time	55-95min
Gas Capacity	10ml
Temperature Of Hot Blow	Up to 500°C
Temperature Of Soldering	Up to 450°C
Dimensions	144(L) x 35(W) x 23(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Gas Soldering Iron	TH-1604	\$29.95	\$26.95	\$23.95
1mm Conical Tip	TH-1603	\$3.95	\$3.45	\$3.15

### GAS BLOW TORCH WITH BUTANE GAS

Useful for lighting a combustion fireplace, out camping, and a range of handyman and hobbyist functions. Lit with an integrated piezo igniter this unit attaches directly onto the gas canister, so you can just get the job done. You'll get more than 2hrs usage from a single can.

- One-touch automatic piezo ignition
- Ergonomic design
- Adjustable temperature

SPECIFICATIONS	TH-1632
Gas Consumption	100g/hr
Included Gas	Butane 277g
Weight	174g (torch unit)
Dimensions	180(L) x 60(W) x 35(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
227g	TH-1632	\$29.95	\$26.95	\$23.95
4 x 220g Spare Gas	NA-1021	\$7.95	\$7.15	

### PIEZO IGNITION BUTANE GAS TORCH

Perfect for silver soldering, brazing, heat treating, heatshrinking, paint removal etc. It's able to produce a flame about 100mm long, so is capable of more than light-duty work. The 64ml tank gives a burn time of 60-70 minutes and uses any butane gas. It also has an adjustable flame, a child-proof piezo ignition button and a stand so you don't knock it over and burn the house down.

- Piezo ignition with safety lock
- 1300°C adjustable flame
- Butane gas refill: NA-1020
- Dimensions: 150(H), base 69 x 69mm

CAT.	Qty 1+	Qty 3+	Qty 6+
TS-1660	\$39.95	\$35.90	\$31.90

### 3 IN 1 MINI GAS SOLDERING TOOL SET

A handy gas soldering iron with flame or flameless heat blower function. Great for general heating, drying, melting, cutting, soldering, heat shrinking etc. It also features adjustment for temperature control, Piezo ignition, retractable stand, visible gas tank and child resistant latch. The tip has a sturdy cap for when not in use. Carry case includes 1mm tip, 3mm chisel tip, 5mm angle tip, hot knife tip, 1mm solder hobby pack, cleaning sponge and tray.

Spare 1mm Conical Tip available: TH-1603

Butane gas required - use NA-1020

SPECIFICATIONS	TH-1606
Burning Time	55-95min
Gas Capacity	7ml
Power Range	25W to 70W
Flame Temp	Up to 1300°C
Iron Dimensions	148(L) x 35(W) x 23(D)mm
Case Dimensions	175(W) x 125(D) x 33(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
3 In 1 Mini Gas Soldering Tool Kit	TH-1606	\$44.95	\$40.45	\$35.90
1mm Conical Spare Tip	TH-1603	\$3.95	\$3.45	\$3.15



## GAS TORCHES & COMBOS (CONTINUED)

### GAS SOLDERING & HEATSHRINK KIT

Excellent value and a handy kit to have close at hand for those quick and urgent repairs. Includes many of the necessary accessories for your wiring and soldering needs, making it an ideal kit for the home handyman, enthusiast or electrician. Supplied in a hard plastic carry case.

#### This kit contains:

- Pro Gas Soldering Iron with built-in stand, and cap. Spare tips included: Chisel tip, anvil tip, flat tip, deflector, solder, cleaning sponge
- 3mm Desolder Braid (NS-3020)
- 115mm Stainless Steel Side Cutters (TH-1890)
- Heavy Duty Wire Stripper/Cutter/Crimper with Wire Guide (TH-1827)

- 28 Piece Screwdriver set
- Heatshrink assortment:  
1.5mm - 20 x black, 5 x red, 5 x clear  
2.5mm - 10 x black, 3 x red, 3 x clear  
3.0mm - 8 x black, 2 x red, 2 x clear  
5.0mm - 7 x black, 2 x red, 2 x clear  
6.0mm - 3 x black, 1 x red, 1 x clear
- Straight Demagnetised 116mm Long Tweezers, Curved Demagnetised 121mm Long Tweezers
- Small 9 x LED Torch 26(Dia.) x 84mm (Requires 3 x AAA batteries)
- Case dimensions: 130(W) x 150(D) x 70(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering & Heatshrink Kit	TS-1115	\$129.00	\$115.95	\$102.95

## 5V USB SOLDERING IRON

### USB POWERED 8W SOLDERING IRON

This handy little soldering iron will work anywhere you have USB power, which let's face it, is basically everywhere these days. Even if it's from a laptop or power bank, USB power is almost easier to come by than mains power when away from the home or office, or in the workshop or shed. Unlike a conventional mains iron which heats up persistently, this one has a touch-switch to activate, and it rapidly heats to 380-400°C in just 15 seconds, and you're ready to solder. The heating element is rated at 8W, so it's useful for fine electronics and small jobs not sinking a lot of heat (such as thick cables, better left for appropriate soldering irons). The heating element is integrated into the soldering tip, so heating and cooling is very rapid. Includes a long life tip, protective cap, and USB power cable.

*Note - at 8W, your USB port will need to be rated with at least 2A, which most newer charging ports are equipped to supply. Older USB ports may struggle to power this device.*

- Heats up in under 15 seconds
- Cools down in under 30 seconds
- Long-life tip with protective cap
- 2 in 1 heating element and soldering tip
- Automatic shutoff



SPECIFICATIONS	TS-1532
Input	5V USB
Power	8W
Tip Temperature	380°C - 400°C
Auto Shut Off	25 Seconds Idle
Weight	25g
Dimensions	170(H) x 20(Dia.)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
8W	TS-1532	\$14.95	\$13.45	\$11.95

## 12V BATTERY POWERED SOLDERING IRONS

### 30W 12VDC SOLDERING IRON - WITH CIGARETTE LIGHTER PLUG

This 12V 30W soldering iron features a fused cigarette lighter plug lead to allow you to power it from the car cigarette lighter socket. Ideal for automotive soldering. Metal sheet solder stand included.

- Dimensions: 205(L) x 35(Dia.)mm
- Lead length: 1.5 metre



	CAT.	Qty 1+	Qty 3+	Qty 6+
30W	TS-1536	\$19.95	\$17.95	\$15.70

### 6W SOLDERING IRON - BATTERY POWERED

We have been surprised by the popular acceptance of this product, considering its modest power rating. Don't expect too much, but it will re-solder a dry joint or fix a solder lug, etc. It is ideal in potentially explosive situations, such as a bilge, or where petrol fumes may be present. Reaches full temp in about 10 seconds.

- Uses 3 x AA batteries (not included)
- Safety cover that locks the switch to "Off" so it won't discharge inside your tool box
- Dimensions: 175(L) x 36(W) x 18(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
6W	TS-1535	\$19.95	\$17.95	\$15.95

## SOLDERING STARTING KITS

### MY FIRST SOLDERING IRON

At last you can have your own soldering iron with minimal adult supervision (min 12 years+). It includes a full power iron with long-life tip, a spare tip, stand for the iron (when it's hot), metal solder removal sucker and a generous portion of 1mm solder wire in a handy dispenser tube. This set will become your best friend in the world of electronics!

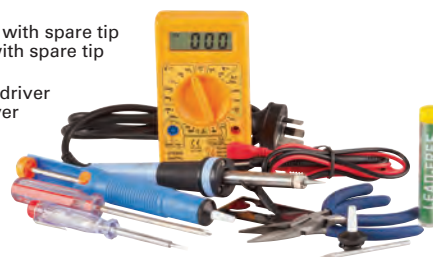


	CAT.	Qty 1+	Qty 3+	Qty 6+
Starter Kit	TS-1651	\$24.95	\$22.35	\$19.70

### 25W SOLDERING IRON STARTER KIT WITH DMM

The ideal starter package for young electronics enthusiasts or the home handyman, this kit contains everything needed for basic electronics work, electronics projects or automotive circuits. The kit includes:

- Digital multimeter
- 25W soldering iron with spare tip
- De-soldering tool with spare tip
- Lead free solder
- Phillips head screwdriver
- Flat head screwdriver
- Side cutters
- Long nose pliers



	CAT.	Qty 1+	Qty 3+	Qty 6+
25W Iron Kit	TS-1652	\$39.95	\$35.90	\$31.90
Spare Tip To Suit	TS-1622	\$8.95	\$8.25	\$6.95

## Select Your Model: Electric Soldering Irons



	TS-1465	TS-1468	TS-1554	TS-1540	TS-1470	TS-1475	TS-1430	TS-1485	TS-1536	TS-1535	TS-1532
<b>Voltage</b>	240V	240V	240V	240V	240V	240V	240V	240V	12VDC	3VDC	5V USB
<b>Power (Watts)</b>	25W	25W	20W/130W	30W	40W	40W	80W	80W	30W	6W	8W
<b>Temp. Range</b>	380°C	360-400°C	420°C	200-450°C	420-450°C	470°C	320°C	530°C	430°C	430°C	380-400°C
<b>Page</b>	215	215	215	215	215	215	215	215	214	214	214

### ✓ SOLDERING IRONS - 240VAC

#### 25W SOLDERING IRON

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip, impact resistant handle.

- Spare tip available - TS-1466



#### DURATECH

OUR MOST POPULAR IRON!

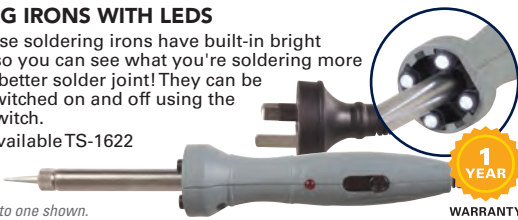
	CAT.	Qty 1+	Qty 3+	Qty 6+
25W Soldering Iron	TS-1465	\$13.95	\$12.35	\$10.95
Spare Tip	TS-1466	\$3.95	\$3.45	\$3.15

#### SOLDERING IRONS WITH LEDS

Brilliant! These soldering irons have built-in bright white LEDs so you can see what you're soldering more clearly for a better solder joint! They can be optionally switched on and off using the integrated switch.

- Spare tip available TS-1622 -0.5mm conical tip

Colour may vary to one shown.



	CAT.	Qty 1+	Qty 3+	Qty 6+
25W Soldering Iron	TS-1468	\$19.95	\$17.95	\$15.95
40W Soldering Iron	TS-1470	\$24.95	\$22.45	\$19.95
Spare Tip	TS-1622	\$8.95	\$8.25	\$6.95

#### 20/130W TURBO SOLDERING IRON

Sometimes you need that extra bit of heat in your soldering. Push the little red button on this iron and you get a lot more power - from 20 watts to 130 watts to be precise. Weller-style removable barrel, plated tip and ceramic element.

- Spare tips available: TS-1555 - 0.5mm conical tip, TS-1556 - 1mm conical tip, TS-1557 - 2mm chisel



	CAT.	Qty 1+	Qty 3+	Qty 6+
20/130W Turbo Soldering Iron	TS-1554	\$17.95	\$16.10	\$14.30
0.5mm Conical Tip	TS-1555	\$4.95	\$4.45	\$3.90
1mm Conical Tip	TS-1556	\$4.95	\$4.45	\$3.90
2mm Chisel Tip	TS-1557	\$4.95	\$4.45	\$3.90

#### 40W SOLDERING IRON

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip impact-resistant handle.

- Fully electrically safety approved
- Spare tip to suit use Cat. TS-1476



#### DURATECH

	CAT.	Qty 1+	Qty 3+	Qty 6+
40W Soldering Iron	TS-1475	\$18.95	\$16.95	\$14.95
Spare Tip	TS-1476	\$4.95	\$4.45	\$3.90

#### 30W TEMPERATURE CONTROLLED SOLDERING IRON

If your budget doesn't extend to a soldering station, you can still have temperature control. This iron is adjustable with a dial on the handle.

- It has a temperature range of 200 - 450°C, high enough for silver soldering if needed
- Plated long-life tip
- Spare tip available TS-1542 - 1mm conical tip



	CAT.	Qty 1+	Qty 3+	Qty 6+
30W Soldering Iron	TS-1540	\$29.95	\$26.95	\$23.95
1mm Conical Tip	TS-1542	\$4.95	\$4.45	\$3.90

#### 80W SOLDERING IRON

Ideal for the hobbyist and handy person. Has a stainless steel barrel and orange cool grip, impact resistant handle.

- Ideal for heavy electrical work, lugs, etc
- Fully electrically safety approved
- Spare tip to suit use Cat. TS-1486



#### DURATECH

	CAT.	Qty 1+	Qty 3+	Qty 6+
80W Soldering Iron	TS-1485	\$22.95	\$20.35	\$18.35
Spare Tip	TS-1486	\$8.95	\$7.95	\$6.95

#### 80W GOOT SOLDERING PENCIL - 240V

This high quality soldering iron is made in Japan by Goot. This soldering iron offers exceptional heat recovery. The ceramic heater is automatically controlled by the heating load of the tip. With its high insulation and low current leakage, soldering of precision flat ICs and CMOS is safe. The heater on/off control uses a zero-volt switch circuit which reduces electrical noise.

- Tip temperature is set at 320°C
- The power lead is made from silicone rubber - very flexible
- The handle incorporates a ribbed rubber piece for extra grip
- Electricity Safety Approval Number SAITE20185



	CAT.	Qty 1+	Qty 3+	Qty 6+
80W Soldering Pencil	TS-1430	\$79.95	\$71.95	\$63.95
0.5mm Conical Tip (As Supplied)	TS-1432	\$19.95	\$17.95	\$15.95
0.3mm Conical Tip	TS-1434	\$19.95	\$17.95	\$15.95
3.0mm Chisel Tip	TS-1436	\$19.95	\$17.95	\$15.95

## Select Your Model: Soldering Stations

	TS-1610	TS-1620	TS-1564	TS-1584	TS-1640	TS-1440	TS-1645
<b>Station Type</b>	Soldering	Soldering	Soldering	Soldering	Soldering	Soldering	Hot Air
<b>Power (Watts)</b>	10W	40W	48W	50W	60W	70W	300W
<b>Temp. Range</b>	100-450°C	150-450°C	150-450°C	350-398°C*	160-450°C	200-480°C	100-450°C
<b>Display</b>					LED	LED	LED
<b>ESD Safe</b>				•	•	•	
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\*Temperature rating is set by the soldering iron tip.

### ✓ SOLDERING STATIONS - 240VAC

#### 10W SOLDERING STATION - 240VAC

Exceptionally delicate, temperature controlled soldering iron. With low pencil weight will help reduce fatigue on your hands when working for prolonged periods. Compact so you can almost keep it in your toolkit, and still have the precision you need on-site. The delicate pencil has enough power to work with fine components and circuits and good for very thin hookup style cable. Suitable for lead-based and lead-free solder thanks to the 100-450°C temperature range. Temperature is selected with the rotary dial, and the base unit includes an integrated stand.

- Integrated soldering pencil holder



<b>SPECIFICATIONS</b>	<b>TS-1610</b>
<b>Recommended Use</b>	Hobby
<b>Power</b>	10W
<b>Temperature Range</b>	100-450°C
<b>Analogue/Digital</b>	Analogue
<b>ESD Rated</b>	No
<b>Lead-Free Rated</b>	No
<b>Dimensions</b>	100(L) x 65(W) x 63(D)mm, 600g



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Station 10W	TS-1610	\$29.95	\$26.95	\$23.95
Spare Pencil	TS-1611*	\$4.95	\$4.45	\$3.95

#### 40W SOLDERING STATION - 240VAC

An ideal entry-level soldering station for the hobby user. This station comes with a lightweight iron with anti-slip grip and tip cleaning sponge, with temperature adjustment up to 450°C. It also has a 4mm banana socket connected to mains earth for soldering static-sensitive components.

- Spare tip 0.5mm conical: TS-1622



<b>SPECIFICATIONS</b>	<b>TS-1620</b>
<b>Recommended Use</b>	Hobby
<b>Power</b>	40W
<b>Temperature Range</b>	150-450°C
<b>Analogue/Digital</b>	Analogue
<b>ESD Rated</b>	No
<b>Lead-Free Rated</b>	No
<b>Dimensions</b>	135(L) x 82(W) x 70(H)mm



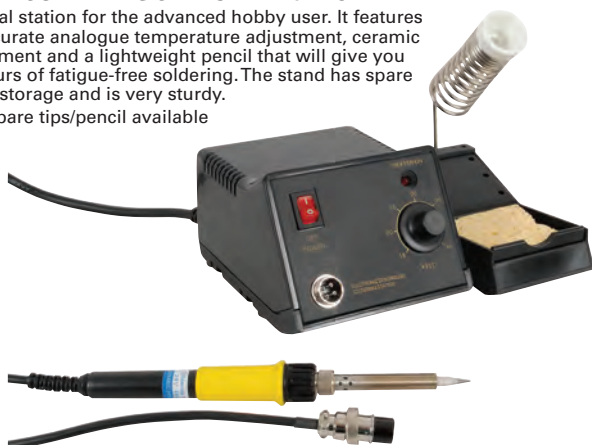
WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Station 40W	TS-1620	\$59.95	\$53.95	\$47.90
0.5mm Conical Tip	TS-1622	\$8.95	\$8.25	\$6.95

#### 48W SOLDERING STATION - 240VAC

Ideal station for the advanced hobby user. It features accurate analogue temperature adjustment, ceramic element and a lightweight pencil that will give you hours of fatigue-free soldering. The stand has spare tip storage and is very sturdy.

- Spare tips/pencil available



<b>SPECIFICATIONS</b>	<b>TS-1564</b>
<b>Recommended Use</b>	Hobby
<b>Power</b>	48W
<b>Temperature Range</b>	150 - 450°C
<b>Analogue/Digital</b>	Analogue
<b>ESD Rated</b>	No
<b>Lead-Free Rated</b>	Yes
<b>Dimensions</b>	150(L) x 115(W) x 92(H)mm



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Station 48W	TS-1564	\$99.95	\$89.95	\$79.95
Spare Pencil	TS-1565	\$39.95	\$35.90	\$31.90
0.5mm Conical Tip	TS-1566	\$9.95	\$9.25	\$7.75
2.0mm Chisel Tip	TS-1567	\$9.95	\$9.25	\$7.75



## ▼ SOLDERING STATIONS - 240VAC (CONTINUED)

### 60W ESD SAFE SOLDERING STATION WITH LED DISPLAY - 240VAC

Featuring a powerful 60W heating element, you can dial in your preferred temperature settings with accuracy thanks to the digital display. It comes supplied complete with a vented soldering iron stand, with integrated sponge and tray to keep it clean. Select from Celsius or Fahrenheit temperature display.

- 30sec warm-up time to 350°C(Approx.)
- High temperature stability
- LED display

SPECIFICATIONS	TS-1640
Recommended Use	Hobby
ESD Rated	Yes
Lead-Free Rated	Yes
Analogue/Digital	Digital
Power	60W
Temperature Range	160-480°C
Operating Voltage	240VAC
Dimensions	160(L) x 104(W) x 124(D)mm
Weight	1.5kg



	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Station 60W	TS-1640	\$149.00	\$133.95	\$118.95
Spare Pencil	TS-1641	\$19.95	\$17.95	\$15.95
0.5mm Conical Tip	TS-1642	\$9.95	\$8.95	\$7.95
2mm Conical Tip	TS-1643	\$9.95	\$8.95	\$7.95
3mm Bevel Tip	TS-1644	\$9.95	\$8.95	\$7.95

### 300W HOT AIR REWORK STATION WITH LED DISPLAY - 240VAC

SMD rework is a challenging task, but this rework station helps you get it done. With 300W of power and a selection of tip sizes, it allows you the precision and flexibility required to get it done.

By using hot air rather than a soldering iron, you provide a more uniform heat transfer and can

melt all solder pads at once, providing a method to remove the chip safely and effectively. You can then clean up the PCB, and use soldering paste (not included) to solder your new chip in place. Temperature selection is done via the digital display and push buttons, while air flow is controlled via the rotary dial. The base unit features an integrated dock for the blower to keep it from burning anything, which also puts it into automatic sleep mode. Lift the blower and it will quickly come back to temperature.

- Automatic sleep function
- LED display
- Variable air flow
- Suitable for SOIC, CHIP, QFP, PLCC, BGA & more

SPECIFICATIONS	TS-1645
Recommended Use	Trade / Industrial
ESD Rated	Yes
Lead-Free Rated	Yes
Analogue/Digital	Digital
SOLDERING IRON	TS-1645
Power	300W
Temperature Range	100-500°C
Operating Voltage	240VAC
Dimensions	160(L) x 113(W) x 123(D)mm
Weight	1kg



	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Station 300W	TS-1645	\$149.00	\$133.95	\$118.95
4.4mm Blower Tip	TS-1576	\$9.95	\$8.95	\$7.95
10 x 10mm Quad Tip	TS-1577	\$14.95	\$13.45	\$11.95
15 x 15mm Quad Tip	TS-1578	\$14.95	\$13.45	\$11.95

### 70W ESD SAFE ANTI-STATIC SOLDERING STATION WITH LED DISPLAY - 240VAC

Precision, Japanese manufactured instrument with excellent temperature stability and anti-static characteristics. Soldering Pencil: Lightweight pencil features a grounded tip, ceramic heater, integrated temperature sensor and very supple silicone rubber grip. The temperature sensor provides precise tip-temperature information to the heater controller, which maintains the selected heat setting with a high degree of accuracy. The tip fits snugly over the heater element providing fast heat transfer and tip temperature recovery during heavy soldering.

- 0.5mm tip supplied

**CONTROL UNIT:** Includes a digital temperature display unit, rotary temperature control, calibration control and display changeover switch to display either the desired or actual tip temperature. The darkened see-through cover prevents accidental temperature change but allows for easy access when required.

- Control dimensions, weight: 146(L) x 115(W) x 98(H)mm, 1.5kg

SPECIFICATIONS	TS-1440
Recommended Use	Trade / Industrial
ESD Rated	Yes
Lead-Free Rated	Yes
Analogue/Digital	Digital
SOLDERING IRON	TS-1440
Power	70W
Operating Voltage	24VAC
Temperature Range	200-480°C
Dimensions	146(L) x 115(W) x 98(H)mm



MADE IN



	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Station 70W	TS-1440	\$299.00	\$269.00	\$239.00
Replacement Sponge	TS-1445	\$7.95	\$6.95	\$6.25
0.2mm Conical Tip	TS-1442	\$19.95	\$17.95	\$15.95
0.5mm Conical Tip	TS-1441	\$19.95	\$17.95	\$15.95

## SOLDERING STATIONS - 240VAC (CONTINUED)

### THERMALTRONICS CURIE HEAT TECHNOLOGY SOLDERING STATION - 240VAC. 50 WATT RATED

It uses a proven technology, Curie point temp sensing with a new twist. The tip is heated by RF induction to bring the tip up to operating temp. The soldering iron tip is the heater. Older Curie point soldering irons like the famous Weller W-TCP used a separate Curie-switch, heater and tip. There are thermocouples, varistors or other temp sensors that only complicate things on inferior irons. The thermal inertia with the Thermaltronics product is far lower. The system consists of the base power unit which connects to mains 240V. The soldering pencil accepts a cartridge tip (which is also the heating element) and a burn-proof silicon rubber cord. The third element in the system is the pencil iron stand. This stand features a 'dry'-type tip cleaner which is made from machine curled brass and also a standard sulphide free tip sponge.

- Tips can be hot swapped
- Constant tip temperature
- Low power idle
- Under 10 second heat-up
- Rapid recovery from soldering load
- No overshoot
- No calibration needed
- ESD rated
- Can work leaded and unleaded solder

#### CONCLUSION

This is a very exciting development in soldering technology. We are sure that you will be delighted with this product.

*Note: Not stocked at all stores but can be ordered.*

*† All tips are 350-398°C.*



SPECIFICATIONS	TS-1584
Recommended Use	Serious Hobbyist / Trade / Industrial
ESD Rated	Yes
Lead-Free Rated	Yes
SOLDERING IRON	TS-1584
Power	50W
Temperature Range	350°C - 398°C (determined by tip)
Output Frequency	470kHz
Tip to GND Resistance	<2 Ohms DC
Tip to GND Potential	2mW, true RMS 50 - 500Hz
Dimensions	155(h) x 110(W) x 92(D)mm
Weight	1.3kg



	CAT.	Qty 1+	Qty 3+	Qty 6+
Soldering Station (inc 0.5mm Tip)	TS-1584	\$379.00	\$339.00	\$299.00
Thermaltronics Replacement Iron	TS-1585	\$129.00	\$115.95	\$102.95
0.51mm Conical Tip†	TS-1586	\$29.95	\$26.95	\$23.95
0.2mm Conical Sharp Tip*†	TS-1589	\$34.95	\$31.45	\$27.95
1.0mm Conical Tip†	TS-1587	\$29.95	\$26.95	\$23.95
3.2mm Chisel Tip†	TS-1588	\$29.95	\$26.95	\$23.95
5.0mm Chisel Tip*†	TS-1590	\$34.95	\$30.95	\$27.95

## SPARE PARTS FOR DISCONTINUED SOLDERING STATIONS

WELLER PART	MM	°C	CAT.	Qty 1+	Qty 3+	Qty 6+
PTA6	1.6	315	TS-1352	\$21.95	\$19.75	\$17.55

ACCESSORIES FOR TS-1574	CAT.	Qty 1+	Qty 3+	Qty 6+
4.4mm Blower Tip	TS-1576	\$9.95	\$8.95	\$7.95
10 x 10mm Quad Tip	TS-1577	\$14.95	\$13.45	\$11.95
15 x 15mm Quad Tip	TS-1578	\$14.95	\$13.45	\$11.95

ACCESSORIES FOR TS-1390	CAT.	Qty 1+	Qty 3+	Qty 6+
0.4mm Conical Tip	TS-1391	\$8.95	\$8.05	\$7.15
2mm Chisel Tip	TS-1393	\$8.95	\$8.05	\$7.15
3mm Bevel Tip	TS-1394	\$8.95	\$8.05	\$7.15



ACCESSORIES FOR TS-1513	CAT.	Qty 1+	Qty 3+	Qty 6+
Spare Desoldering Gun	TS-1514	\$54.95	\$49.45	\$43.90
Spare Ceramic Heater	TS-1515	\$16.95	\$14.95	\$13.35
Spare 0.8mm Conical Tip	TS-1517	\$9.95	\$8.95	\$7.95
Spare 1.0mm Conical Tip	TS-1516	\$9.95	\$8.95	\$7.95
Spare 1.3mm Conical Tip	TS-1518	\$9.95	\$8.95	\$7.95
Spare Filter Set of 2	TS-1519	\$1.95	\$1.75	\$1.55
Spare Black Plastic Cap	TS-1520	\$2.95	\$2.60	\$2.30

## SOLDERING ACCESSORIES

### 6 PIECE SOLDERING TOOL KIT

This kit provides a selection of hand-tools and accessories invaluable for soldering work. There's a Phillips screwdriver, a pair of spring-loaded tweezers, and a heatsink clip for soldering heat-sensitive components. Three assorted double-ended tools are also included for poking, scraping, leg-bending, and even a wire-brush for flux-removal. A great assortment, supplied in a handy case.



*Supplied in a handy case.*



### SOLDER FUME EXTRACTOR

Removes dangerous solder fumes from the work area. Suitable for use in production lines, service centres, R&D workbenches or the hobbyist. It incorporates a ball bearing high volume fan to maximise airflow which is directed upwards at the rear of the unit to aid in safe dispersion of fumes. ESD safe.

- Spare filters, pack of 5 - sold separately CAT. TS-1581
- Dimensions: 260(H) x 200(W) x 170(D)mm



**DON'T PAY SILLY PRICES ELSEWHERE.  
THIS ONE WORKS FINE.**

	CAT.	Qty 1+	Qty 3+	Qty 6+
6 Piece Kit	TH-1851	\$14.95	\$13.45	\$11.95

	CAT.	Qty 1+	Qty 3+	Qty 6+
Fume Extractor	TS-1580	\$69.95	\$62.95	\$55.95
Spare Filters - Pack Of 5	TS-1581	\$9.95	\$8.75	\$7.75

## Classic Solder:

- 60% Tin / 40% Lead
- 1.0 & 0.71mm diameters available
- Rosin cored
- Rolls & hobby packs available



### DURATECH

SIZE	HOBBY PACK	CAT.	Qty 1+	Qty 3+	Qty 6+
0.71mm	15-20g	NS-3008	\$1.95	\$1.75	\$1.55
1.0mm	15-20g	NS-3013	\$1.95	\$1.75	\$1.55

SIZE	ROLL WEIGHT	CAT.	Qty 1+	Qty 3+	Qty 6+
0.71mm	200g	NS-3005	\$15.95	\$14.35	\$12.75
1.00mm	200g	NS-3010	\$15.95	\$14.35	\$12.75

SIZE	ROLL WEIGHT	CAT.	Qty 1+	Qty 3+	Qty 6+
0.71mm	1kg	NS-3002	\$69.95	\$62.95	\$55.95
1.00mm	1kg	NS-3015	\$69.95	\$62.95	\$55.95

### FLUX

#### SOLDER FLUX PEN - 12ML

A quick drying, no-clean flux for use when removing or replacing surface mount components. Applying the flux to solder joints will aid re-flow when heating the joint to remove the component, or it can be applied to bare copper or tinned tracks providing excellent solderability.

- Dries in 5 to 10mins
- Handy 12ml pen with chisel tip



	CAT.	Qty 1+	Qty 3+	Qty 6+
12ml	NS-3036	\$11.95	\$10.70	\$9.50

#### SOLDER FLUX PASTE - 56G TUB

A mildly-activated agent to provide superior fluxing ability, which enables you to produce high quality soldered joints, and reducing solder waste. The active ingredients in DeoxIT® Rosin Soldering Flux are non-ionic and non-conductive, and ideal for situations when post-soldering cleaning is not possible, and the residue must be highly insulating.

- Non-flammable
- Non-corrosive



	CAT.	Qty 1+	Qty 3+	Qty 6+
Solder Flux Paste - 56g Tub	NS-3070	\$15.95	\$14.35	\$12.75

### DESOLDER BRAID

#### 3MM DESOLDER BRAID

A specially treated piece of braid for removing solder from a PCB. Place the braid over the solder and apply soldering iron to efficiently remove solder. 3mm wide, 1500mm long.



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
3mm Wide 1500mm	NS-3020	\$3.25	\$2.90	\$2.60

#### GOOT DESOLDER BRAID

High quality Goot brand Gootwick, made in Japan. Contains wash-free RMA flux, conforms to MIL-F-14256F.

- Plastic reels
- 1.5m long



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1.5mm Wide 1500mm	NS-3026	\$5.95	\$5.25	\$4.75
2.0mm Wide 1500mm	NS-3027	\$5.95	\$5.25	\$4.75
3.0mm Wide 1500mm	NS-3028	\$5.95	\$5.25	\$4.75

MADE IN



## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!



## Lead-Free Solder:

- 99.3% Tin / 0.7% Copper - Lead Free
- 1.0 & 0.71mm diameters available
- Rosin cored
- Rolls & hobby packs available



### DURATECH

SIZE	HOBBY PACK	CAT.	Qty 1+	Qty 3+	Qty 6+
0.71mm	15-20g	NS-3086	\$2.95	\$2.75	\$2.30
1.00mm	15-20g	NS-3092	\$2.95	\$2.75	\$2.30

SIZE	ROLL WEIGHT	CAT.	Qty 1+	Qty 3+	Qty 6+
0.71mm	200g	NS-3088	\$24.95	\$22.45	\$19.95
1.00mm	200g	NS-3094	\$24.95	\$22.45	\$19.95

SIZE	ROLL WEIGHT	CAT.	Qty 1+	Qty 3+	Qty 6+
0.71mm	500g	NS-3090	\$54.95	\$49.45	\$43.95
1.00mm	500g	NS-3096	\$54.95	\$49.45	\$43.95

### SILVER SOLDER

#### "SILVER" SOLDER

Far, far stronger than tin/lead solder. The product is basically pure tin with around 4% silver. It contains no lead or cadmium. It melts at 221°C so could be actually soldered with a very hot soldering iron but best results are with a butane type blowtorch. Includes an adequate amount of liquid flux which is basically zinc chloride, water, ammonia and other chlorides. The flux is an eye irritant so safety goggles should be worn.

- 14g solder with 14g of flux
- Wire diameter: 1.16mm approx
- MSDS supplied
- Coil length: 1.8m approx



	CAT.	Qty 1+	Qty 3+	Qty 6+
14g Solder + 14g Flux	NS-3045	\$24.95	\$22.45	\$19.95

### DESOLDER TOOLS

#### PLASTIC DESOLDER TOOL

ABS plastic body with strong suction. Very easily cleaned. Total length including tip 195mm.



TH-1860

	CAT.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1860	\$11.95	\$10.70	\$9.50
Spare Tip	TH-1861	\$3.95	\$3.45	\$3.15

#### METAL DESOLDER TOOL

Made of lightweight metal and has strong suction.



TH-1862

- Constant vacuum force
- Cleans itself with each action
- Replacement tip (Teflon)
- Total length incl tip - 195mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1862	\$16.95	\$14.95	\$13.35
Spare Tip	TH-1863	\$4.95	\$4.45	\$3.90

#### DELUXE GOOT DESOLDERING TOOL

High quality GOOT brand desoldering tool. Japanese built quality and a large vacuum chamber for strong suction.

- Large vacuum chamber - Total length: 330mm



MADE IN



	CAT.	Qty 1+	Qty 3+	Qty 6+
Tool	TH-1856	\$27.95	\$24.95	\$22.35
Spare Tip	TH-1857	\$8.95	\$7.95	\$6.95

#### SOLDER SUCKER & BLOWER BULB

A quick & simple bulb type solder sucker that is cheap, compact and effective. Buy two or three and you will always have one handy.

- Approximately 50(D) x 110(L)mm
- Versatile! Suck or blow



	CAT.	Qty 1+	Qty 3+	Qty 6+
Solder Sucker	TH-1850	\$6.95	\$6.25	\$5.50



## SOLDER PASTE

### CLASSIC SOLDER PASTE - 15G SMD SYRINGE

Ideal for surface mount work and rework, solder paste provides a quick and easy soldering solution. Supplied in a syringe for easy application, simply apply it to the soldering pads, put your components in place and heat it with your soldering iron. Solder paste can go off in storage: we've found a local supplier so you can always be confident that the paste you get will be fresh. 63% tin 37% lead. Solder paste is best kept cool for long life and should be kept refrigerated. Please ask sales staff for this product, as it will be kept in refrigerated storage, not on display. Dimensions: 120(L) x 15(Dia)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
15g	NS-3046	\$12.95	\$11.35	\$10.35

### LEAD-FREE SOLDER PASTE - 10G SMD SYRINGE

Lead free solder paste syringes provide a quick and easy soldering solution for your surface mount work and rework. The superior wetting ability of this paste results in bright, smooth and shiny solder joints with lead free alloys. Supplied in a syringe for easy application, simply apply to the soldering pads, put your components in place and heat it with your soldering iron or hot air rework tool.



	CAT.	Qty 1+	Qty 3+	Qty 6+
10g	NS-3048	\$13.95	\$12.55	\$11.15

## STANDS, CLEANERS & PCB HOLDERS

### SOLDERING IRON STANDS

#### ECONOMY

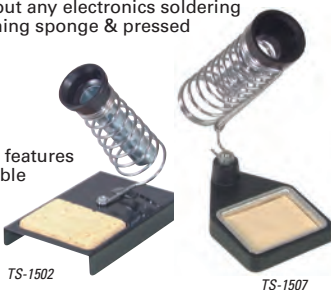
General-purpose stand for just about any electronics soldering iron. It has a large, thirsty tip-cleaning sponge & pressed metal base.

- Base: 84(W) x 130(D) x 25(H)mm
- Holder: 105(L) x 40(W)mm
- Complete height: 120mm

#### DELUXE

Ideal for heavier soldering irons. It features a hefty cast iron base with removable sponge tray and twin spiral iron holder.

- Base: 78(W) x 115(D) x 30(H)mm
- Holder: 135(L) x 45(W)mm
- Complete height: 145mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Economy Stand	TS-1502	\$9.95	\$8.75	\$7.75
Spare Sponge To Suit Ts-1502	TS-1503	\$2.75	\$2.45	\$2.15
Deluxe Stand	TS-1507	\$16.95	\$14.95	\$13.35
Spare Sponge To Suit Ts-1507	TS-1508	\$3.95	\$3.45	\$3.15

### SOLDER STAND WITH SOLDER DISPENSER

Every technician needs one of these on their workbench! It will hold our solder reels and the solder is fed through the guide. It has a handle, so it can easily be carried, and it can be wall mounted to be right there where you always need it. The base is super heavy so even when the solder reel is nearly empty it will feed ok.

- Shaft diameter is 16mm and will hold our 1kg rolls
- Weight 620g
- Dimensions: 90(L) x 100(W) x 110(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TS-1504	\$19.95	\$17.95	\$15.70

### GOOT SOLDERING IRON TIP CLEANER

The "curly brass" insert doesn't need to be kept wet and cleans without damaging the tip. Uniform iron temperature ensures consistent joint quality and reduces cycle times. It's made from a heavy-duty heat-resistant rubber base that won't slip around on the bench, is static-safe and is also suitable for lead-free solders.

- Supplied with spare insert
- Dimensions-Insert: 45(Dia) x 30(H)mm
- Overall: 58(Dia) x 58(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TS-1510	\$17.95	\$15.95	\$14.35

### SOLDERING IRON TIP CLEANING PASTE

A healthy tip makes for easier soldering and better heat transfer. This tip contains powdered solder and noncorrosive flux, so all you need to do is dip your hot soldering tip in, and it will clean and tin in one simple action.



	CAT.	Qty 1+	Qty 3+	Qty 6+
15g Tin	TS-1512	\$12.95	\$11.35	\$10.35

### PCB HOLDER

Holds a PCB up to 200 x 140mm in size. The PCB is held in place by spring clamps and can be rotated through 360° at increments of 15°. The base is heavy with well-balanced centre of gravity and built-in rubber feet to ensure you have a firm working surface. Suitable for working with different shaped components, connectors, soldering strips, etc.

- Max holding size: 200(L) x 140(W)mm
- Dimensions: 300(L) x 165(W) x 125(H)mm, 450g



	CAT.	Qty 1+	Qty 3+	Qty 6+
PCB Holder	TH-1980	\$19.95	\$17.95	\$15.70

### PCB HOLDER WITH LED MAGNIFIER

Ideal aid for PCB assembly, soldering work, model making and any application where a third hand is needed. This helping hand has a magnifying glass with LED light that provides continuous light for up to 10 hours. The two strong alligator clips can be adjusted in numerous ways to hold the board as you solder. Heavy cast iron base ensures added stability. Comes complete with a soldering iron holder.

- LED: 2 x White LED
- Lens size: 90(Dia.)mm
- Lens magnification: 2x
- Power: Requires 3 x AAA batteries
- Dimensions: Overall height: 190mm Base dimensions: 114(L) x 75(W) x 29(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1987	\$19.95	\$17.95	\$15.95

### LED MAGNIFYING LAMP WITH THIRD HAND

The multi-purpose tool offers an excellent all round solution, ideal for working on small to medium PCBs, components, soldering etc. The magnifying lamp with integrated 3rd hand is intended for illuminating work areas and it is equipped with a magnifying glass. This device also comes with a soldering iron stand, alligator clips, soldering wire spool holder, sponge as well as a cleaning ball. Powered by 4 AA batteries (not supplied).

- Magnifying glass lens size 90mm
- Magnification: 3x
- LED illumination: 16 LEDs
- Neck (for magnifying glass) length: 265mm
- Neck (for alligator clips) length: 250mm
- Sponge size: 30 x 50mm
- Base size: 190 x 170mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1989	\$44.95	\$40.45	\$35.95

## ▼ SPRAYS & AEROSOLS



### LITHIUM GREASE

Long-lasting heavy duty lubricant grease for bearings, sliding mechanisms, battery terminals, chains, sprockets or other moving parts. White in colour so it forms a kind of thick, milky sea in the lubricated area. Reduce friction, protects against corrosion.

	CAT.	Qty 1+	Qty 4+	Qty 10+
400g	NA-1015	\$9.95	\$8.75	\$7.75

### INOX-MX3 LUBRICANT, CORROSION INHIBITOR

This product is similar to popular water displacement products EXCEPT that it does not contain silicone or kerosene based solvents etc. Indeed, it is so benign it can be used around food. It is also ideal for seized nuts or screws, freeing up hinges, door locks, as a cutting or tapping & other machining agent. As the product is nonconductive, it is ideal for removing moisture from car distributors, switches, potentiometers, solenoids etc. It does not dry or wash out in water. You will be delighted with this product. Two sizes are available:

CAT. NA-1022 125g Pump Pack (can be sent by post)

CAT. NA-1024 300g Aerosol Spray (can't be sent by post)

	CAT.	Qty 1+	Qty 4+	Qty 10+
125g - Spray Pump	NA-1022	\$8.95	\$8.05	\$7.15
300g - Spray Can	NA-1024	\$12.95	\$11.45	\$9.95

### PTFE DRY LUBRICANT SPRAY

This water displacing PTFE lubricant is formulated to provide a dry, lubricating film that is perfect for use with electronic & mechanical assemblies, chains & sprockets, rollers, runners, & power tools etc. It prevents rusting on ferrous metals and helps loosen stiff or sticking parts. The spray can be used in automotive, marine and household environments.

	CAT.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1013	\$14.95	\$13.45	\$11.95

### CONTACT CLEANER LUBRICANT

A blend of non CFC solvents and RF contact treatment oil. Ideal for cleaning and lubricating non-arcng contacts and mechanisms. Can be used for cleaning & lubricating all types of contacts. Safe on most plastics.

	CAT.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1012	\$11.50	\$10.35	\$8.95

### CIRCUIT BOARD LACQUER

Non CFC ozone safe propellant. Premium quality flexible coating to protect printed circuit boards from humidity and environmental attack. Special solder through lacquer so previously coated boards can be soldered.

	CAT.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1002	\$11.50	\$10.35	\$8.95

### ELECTRONIC CIRCUIT BOARD CLEANER

Non CFC ozone safe propellant. It may not be obvious, but many circuit problems occur when flux and other contaminants (even finger prints) remain on the PCB causing 'leakage' between tracks. If you work with RF, high impedance (i.e. FET Op-Amps etc), ioniser or other circuits, PCB cleanliness is a MUST. This is a spray that dissolves flux residues & grime leaving the track work and board absolutely clean. We then recommend that you 'tropicalise' the board with circuit board lacquer (NA-1002).

	CAT.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1008	\$11.50	\$10.35	\$8.95

### DUST REMOVER

Non CFC. Non flammable gas which allows removal of dust from electronic, electrical and optical devices. It does not leave residues and is non toxic and non conductive.

• Much safer than flammable versions sold elsewhere

	CAT.	Qty 1+	Qty 4+	Qty 10+
250g	NA-1018	\$19.95	\$17.70	\$15.70

### FREEZING SPRAY

Non CFC ozone safe propellant. Instant freeze spray for rapidly cooling components to detect intermittent thermal faults, dry joints and overheating problems.

• Non-flammable

	CAT.	Qty 1+	Qty 4+	Qty 10+
250g	NA-1000	\$19.95	\$17.70	\$15.70

### BUTANE GAS

Use it for filling up your gas soldering iron, flame torches, cigarette lighters, etc. Includes five different adaptors, which cover most different gas valves.

• Includes filling instructions

	CAT.	Qty 1+	Qty 4+	Qty 10+
150g	NA-1020	\$4.95	\$4.45	\$3.95

### ISOPROPYL ALCOHOL 99.8% SPRAY

Isopropyl alcohol is one of the most useful service aids you can have around. It has many of uses such as head cleaning, surface cleaning and prep, contact cleaning, stain removal in the laundry etc. It's also a medical-grade surface disinfectant. Easy to use pump pack spray bottle & dries quickly.

• 99.8% concentration

	CAT.	Qty 1+	Qty 4+	Qty 10+
250ml	NA-1066	\$8.95	\$7.95	\$6.95
300g	NA-1067	\$9.95	\$8.75	\$7.75

### ELECTRONIC CLEANING SOLVENT

Non CFC ozone safe propellant. A highly efficient fast drying solvent of high purity. For use on delicate electronic, electrical & precision mechanical assemblies (i.e. tuners, switches, plugs, sockets, relays, pots, etc).

	CAT.	Qty 1+	Qty 4+	Qty 10+
Electronic Cleaning Solvent 175g	NA-1004	\$11.50	\$10.35	\$8.95

### SPRAY-ON CONTACT ADHESIVE

This pressure-sensitive contact adhesive is in an aerosol can, and bonds to paper, fabric, leather, rubber, foam, vinyl, concrete, metal, in fact almost any surface! No more spills and dribbles from a tube, or sticky screwdrivers (and plastic applicators) from applying glue to a surface. Great for laying innerbond and speaker carpet in/on speaker cabinets etc.

	CAT.	Qty 1+	Qty 4+	Qty 10+
Spray-On Contact Adhesive 400g	NA-1504	\$16.95	\$14.95	\$13.35

### AEROSOL BUTANE GAS WITH BAYONET FITTING 4 PACK

Butane cartridges commonly used in gas stoves, heaters and butane gas blow torches.

• Capacity: 220g each  
• Size: 68(Dia.) x 180(H)mm

	CAT.	Qty 1+	Qty 4+
4 x 220g	NA-1021	\$7.95	\$7.15



**Find Out More In Store:**

Our staff offer friendly and helpful service.  
We're here to help.



## WATER DISPLACING LUBRICANTS

### WATER DISPLACING LUBRICANT SPRAY CAN

Multi-use water displacing and rust preventing lubricant specially formulated for use with electronic and mechanical assemblies. Displaces moisture from metal surfaces including: relays, switches, distributors etc... Quickly penetrates rusted and corroded metal parts like nuts and bolts, valves, tools... Also removes grease, chewing gum, adhesives, crayons from most surfaces.



	CAT.	Qty 1+	Qty 4+	Qty 10+
175g	NA-1025	\$4.95	\$4.45	\$3.95

### WD40 150G SPRAY CAN

Multi-use water displacing and rust preventing lubricant specially formulated for use with electronic and mechanical assemblies. Displaces moisture from metal surfaces including: relays, switches, distributors etc... Quickly penetrates rusted and corroded metal parts like nuts and bolts, valves, tools.



	CAT.	Qty 1+	Qty 4+	Qty 10+
150g	NA-1029	\$7.95	\$7.15	\$6.35

## Tech Talk: God-Like Spray Can Behaviour

Many people will not go anywhere without a can of WD40. It is a great product and you will find it on this page. It is not the only God-in-a-can product that we stock, however. We also carry a similar product to WD40 called WD Lube (also on this page). (WD means water displacement). The water displacement property is basically an oil which is silicone based. Silicone oil is very effective, for example, if you need to spray inside an automotive ignition distributor cap to stop short circuiting from water. (Indeed the original WD40 type products were made specifically to clear automotive ignition problems from water ingress). A further refinement is a product called INOX MX3. It does not contain petroleum or silicone based products and is indeed non-poisonous (the other products are not strictly poisonous, just obnoxious to taste) so much so that you can spray INOX near food. All God-in-a-can products have come a long way from their original automotive use. They have great anti-corrosion and lubrication properties, for example. They continue to find applications all over the place, but with modern ignition systems you can probably safely leave home without a can.



## TAPE

### PVC INSULATION TAPE - 20M

High quality insulation tape suitable for wrapping electrical wires.

- Tape thickness: 0.18mm
- Roll length: 20m
- Self-Extinguished within 2 seconds after being on fire
- Voltage breakdown: 8.0kV



		CAT.	Qty 1+	Qty 4+	Qty 10+
Black	20m	NM-2856	\$1.65	\$1.45	\$1.30

### PVC INSULATION TAPE

Top quality PVC tape.

- Two sizes and six colours available
- 18mm wide



COLOUR	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	5m	NM-2800	\$1.25	\$1.10	\$1.00
Blue	20m	NM-2801	\$2.95	\$2.65	\$2.35
Red	20m	NM-2802	\$2.95	\$2.65	\$2.35
Black	20m	NM-2803	\$2.95	\$2.65	\$2.35
White	20m	NM-2807	\$2.95	\$2.65	\$2.35
Ylw/Gn	20m	NM-2804	\$2.95	\$2.65	\$2.35

### INSULATION TAPE - 5M - 6 PACK

Contains one roll each of black, white, red, blue, yellow and green.

- 19mm wide
- Each 5 metres in length
- Pack will vary from picture



	CAT.	Qty 1+	Qty 4+	Qty 10+
Pack of 6	NM-2806	\$3.95	\$3.45	\$3.15

### GAFFER TAPE - 25M

This is not your cheap plastic stuff. It is the genuine cloth-backed tape that you can split with your thumbnail. This waterproof tape is black in colour, low sheen and is the industry standard 48mm wide. Commonly called "100 mile an hour" tape, or "gaffer" tape, it was originally developed for the air conditioning industry.

- It is very adhesive and very strong
- Ideal for taping down leads on stage
- Repairing flexible duct work
- Other public address setups
- Holding things together in general. A must in every toolbox!



		CAT.	Qty 1+	Qty 4+	Qty 10+
Black	25m	NM-2810	\$14.95	\$13.45	\$11.95

### NASHUA GAFFER TAPE - 40M

PREFERRED BY THE PROFESSIONALS.

Genuine Nashua brand Gaffer tape. Professional quality 40 metre rolls in both black and silver. Leaves no residue behind and sticks to most clean surfaces, including carpet. 48(W)mm x 40(L)m.

Ideal for:

- Outdoor concerts & exhibitions
- Theatre & school productions
- Television studios
- Car racing



### GENUINE "GAFFER" BRAND TAPE IN HI-VIZ COLOURS - 10M

Genuine made-in-USA 24mm wide x 10m roll in Hi Viz fluoro green or hot pink. Matte finish. Ideal for highlighting a piece of equipment, avoiding a hazard, etc.

100s of uses.

- Waterproof
- 24mm wide x 10m



NM-2813

NM-2815

		CAT.	Qty 1+	Qty 4+	Qty 10+
Chrome Fluoro Green	10m	NM-2813	\$14.95	\$13.45	\$11.95
Hot Fluoro Pink	10m	NM-2815	\$14.95	\$13.45	\$11.95

### SELF AMALGAMATING TAPE - 10M

This insulating tape will "cure" into a single mass (once applied) to help seal and waterproof cable, wires or even pipes. The tape has good corona resisting properties and can be used on high voltage cables. Useful where water and chemical resistance is important.



	CAT.	Qty 1+	Qty 4+	Qty 10+
10m	NM-2826	\$19.95	\$17.70	\$15.70

### ALUMINIUM FOIL TAPE - 50M

To be used in any number of situations including RF shielding.

- Foil thickness: 0.04mm
- Raw material: Aluminum foil, Acrylic-based adhesive
- Width 25mm or 50mm
- Application Temp.: -20 to 120°C



		CAT.	Qty 1+	Qty 4+	Qty 10+
50mm	50m	NM-2860	\$17.95	\$15.95	\$14.35
25mm	50m	NM-2862	\$11.95	\$10.70	\$9.50

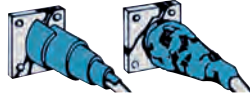


## TAPE (CONTINUED)

### COAX SEAL TAPE

This versatile material looks like ordinary PVC electrical tape but is actually a handy sealing system that fuses together to form a removable, waterproof seal once it has been applied. The tape has many uses such as waterproofing outdoor coax connections, sealing low pressure vacuum lines, or even as an alternative to heat shrink tubing when access is difficult.

- 12(W)mm x 1.5(L)m
- Used by NASA & US Military



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	NM-2828	\$12.95	\$11.35	\$10.35

### DOUBLE SIDED MOUNTING TAPE

Thousands of uses, from mounting PCBs in your project to putting up your Nerd Perks workshop guide. Both are double-sided and the NM-2821 is also foam-backed.

- 12mm wide
- Two roll sizes



	CAT.	Qty 1+	Qty 4+	Qty 10+
10m	NM-2821	\$4.95	\$4.45	\$3.90
25m	NM-2823	\$3.95	\$3.45	\$3.15

### UGLU® INDUSTRIAL GLUE STRIPS

Make quick repairs without tools. Simply cut a strip to the size you need, then fix just like double-sided tape to create a permanent, instant bond. Bonds to just about anything - carpet, plastic, canvas, wood, metal, tile, plasterboard, cement, paper, glass, even on rough surfaces. Non-toxic, acid free, no mess. Millions of uses at home, office and workshop. Pack contains eight 75 x 30mm strips.

- Instant bond, permanent hold
- Waterproof and weatherproof
- Removable - Safe for kids to use
- Made in USA



	CAT.	Qty 1+	Qty 4+	Qty 10+
Pack of 8 75 x 30mm	NA-1522	\$8.95	\$8.05	\$7.15

### SILICON PROTECTIVE AND REPAIR WRAP - TUFF TAPE

TUFFTAPE is a self-bonding wrap made from a special high quality silicone rubber compound which adheres to itself when wrapped under tension. The tape forms a non-conductive, air and water tight, insulating seal. Hundreds of uses including emergency radiator hose repair, plumbing or garden hose repair, extension cord connections, marine, sport and tool grips, etc. Buy one for the glove box and another for the tool box.

- Won't melt up to +260°C,
- Will repair a burst radiator hose
- Remains flexible down to -50°C
- Tensile strength of 600psi
- Insulates to 400 volts/mil
- 25mm wide x 3m long



NA-2830



NA-2832



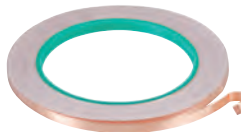
NA-2834

	CAT.	Qty 1+	Qty 4+	Qty 10+
Black 3m	NA-2830	\$14.95	\$13.45	\$11.95
Red 3m	NA-2832	\$14.95	\$13.45	\$11.95
Clear 3m	NA-2834	\$14.95	\$13.45	\$11.95

### ADHESIVE COPPER TAPE 5MM X 10M

CopperTape with adhesive backing.

- Solderable
- Repair printed circuit boards
- Create antennas and shielding
- 5mm x 10m



	CAT.	Qty 1+	Qty 4+	Qty 10+
25m Roll	NM-2870	\$6.95	\$6.25	\$5.55

## Where's My Local Jaycar Store?:

Use our store finder on our website. With over 300 Jaycar Store and Stockists just type in your postcode or area to find the closest one to you.

## ADHESIVES

### EPOXY BOND 34ML

Two part epoxy resin-based adhesive recommended for use where a quick set highstrength adhesive is required. Bonds in approximately 4 minutes to give a colourless, permanent bond. Maximum strength after 1 hour. Ideal for rigid plastics, metal, glass, concrete, china & pottery. Supplied in dual tubes.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	NA-1510	\$8.95	\$8.05	\$7.15

### J-B WELD EPOXY

The world's finest cold-weld compound. It's an easy, convenient and inexpensive alternative to welding, soldering and brazing. It's a two-part epoxy resin and when mixed together forms a compound as tough as steel. Use it as adhesive, plug filler, sealant or electrical insulator. Like metal, it can be formed, drilled, ground, tapped, machined, filled, sanded and painted. It has an open time of about 30 minutes sets in 4-6 hours, and cures fully in 15-24 hours. It's waterproof, petroleum, chemical, and acid-resistant; resists shock, vibration and temperature variations. Super strong, non-toxic and cleans up with soap and water before setting. Bonds almost any combination of iron, steel, copper, aluminium, brass, bronze, pewter, porcelain, ceramic, marble, glass, PVC & ABS, concrete, fibreglass, wood, fabric - just about any porous / non-porous material.

- Mechanical properties (kPa):  
Tensile strength: 27300,  
Adhesion: 12400 / Tensile Lap Shear: 7170
- Shrinkage: 0% / Heat resistance: 260° Celsius
- Contents: 25ml



	CAT.	Qty 1+	Qty 4+	Qty 10+
	NA-1518	\$14.95	\$13.35	\$11.70

### JB WELD STEELSTIK™ EPOXY PUTTY

SteelStik™ is a hand-mixable, steel-reinforced, non-rusting epoxy putty that quickly repairs or rebuilds anything made of metal. After mixing, it forms an industrial-strength polymer compound that can be moulded into shapes or used to build up, patch and repair steel components. SteelStik™ sets in 3-5 minutes and after 60 minutes, can be drilled, tapped, machined, ground, filed and painted. SteelStik™ cures to a dark grey colour, is rated at a tensile strength of 900PSI and will withstand temperatures up to 148°C. Drinking water safe.

Applications include:

- Automotive & Machine Parts
- Exhaust Systems
- Plumbing
- Stripped Threads
- Rust Damage
- Household Repairs
- Fuel Tanks
- 57g (2oz)



	CAT.	Qty 1+	Qty 4+	Qty 10+
JB Weld SteelStik™ Epoxy Putty	NA-1519	\$14.95	\$13.45	\$11.95

### 3 SECOND SUPER GLUE

Ideal for plastics, wood, rubber, glass, metal and ceramics. It sticks in seconds and needs no clamping.

- Supplied in a small tube of 3 grams



	CAT.	Qty 1+	Qty 4+	Qty 10+
	NA-1500	\$1.90	\$1.70	\$1.50

### LIQUID ELECTRICAL TAPE/THREAD LOCKER

This liquid can be used instead of insulation tape. Simply brush it on and it will insulate and seal out moisture. Once dry, it is acid & salt resistant and won't crack, peel or harden even under extreme conditions. This is a very versatile product and can be used for such diverse applications as stopping screws from vibrating loose or ropes unravelling. Available in two colours.



	SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	118ml Can	NM-2832	\$29.95	\$26.95	\$23.95
Red	118ml Can	NM-2834	\$29.95	\$26.95	\$23.95
Black	28g Tube	NM-2836	\$16.95	\$14.95	\$13.45
Red	28g Tube	NM-2838	\$16.95	\$14.95	\$13.45

## SIDE CUTTERS

### 127MM - PRECISION ANGLED SIDE CUTTERS

Precision side cutters that are ideal for fine PCB work. They will easily cut leads flush with the board's surface.

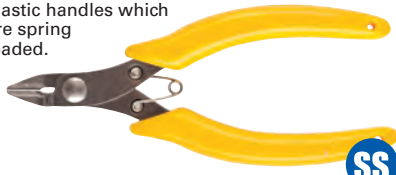
The cutters are made from quality tool steel and have soft padded handles that are spring loaded for comfortable long term use.



CAT.	Qty 1+	Qty 3+	Qty 6+
127mm TH-1897	\$12.95	\$11.65	\$10.35

### 115MM - STAINLESS STEEL SIDE CUTTERS

High quality small side cutters that have thick (2mm) blades and comfort soft plastic handles which are spring loaded.



CAT.	Qty 1+	Qty 3+	Qty 6+
115mm TH-1890	\$13.95	\$12.35	\$10.95

### 110MM - FUJIYA SIDE CUTTERS

Beautifully engineered, perfect for cutting super fine wire as well as general workshop use. They aren't just good to look at, they are tough as well and can cut steel wire up to 1.6mm without harm. The insulated handles are spring loaded for effortless use.

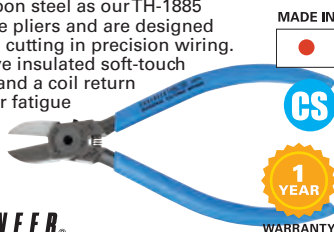
- Blade hardness: Rockwell C Scale 57~61
- Soft grip handle



CAT.	Qty 1+	Qty 3+	Qty 6+
110mm TH-2332	\$29.95	\$27.95	\$23.70

### 150MM - PRECISION SIDE CUTTERS

These cutters are made from the same high carbon steel as our TH-1885 long nose pliers and are designed for sharp cutting in precision wiring. They have insulated soft-touch handles and a coil return spring for fatigue free use.

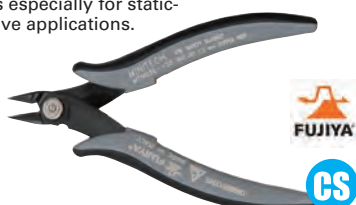


ENGINEER®

CAT.	Qty 1+	Qty 3+	Qty 6+
150mm TH-1891	\$39.95	\$35.90	\$31.90

### 135MM - ESD SAFE SIDE CUTTERS

Specifically for ESD work. High quality Japanese designed, Italian manufactured cutters especially for static-sensitive applications.



CAT.	Qty 1+	Qty 3+	Qty 6+
135mm TH-1922	\$32.95	\$29.45	\$26.50

## LONG NOSE PLIERS

### 150MM - PRECISION LONG NOSE PLIERS

Precision, slim line long nose pliers that are ideal for working in confined areas. They have serrated jaws so you can get a firm grip on the item you're holding. The pliers are made from quality tool steel and have soft padded handles that are spring loaded for comfortable long term use.



CAT.	Qty 1+	Qty 3+	Qty 6+
150mm TH-1887	\$11.95	\$10.70	\$9.50

### 145MM - STAINLESS STEEL LONG NOSE PLIERS

The partner to our TH-1890 stainless steel cutters. These have half round smooth gripping jaws perfect for adjusting and bending components, picking up that dropped nut, etc. Comfortable soft plastic handles which are spring loaded.



CAT.	Qty 1+	Qty 3+	Qty 6+
145mm TH-1893	\$13.95	\$12.35	\$10.95

### 110MM - FUJIYA PRECISION LONG NOSE PLIERS

These are the perfect companion for our TH-2332 precision side cutters and are made to the same exacting specifications. The insulated handles are spring loaded for effortless use.

- Blade hardness: Rockwell C Scale 53~57
- Soft grip handle



CAT.	Qty 1+	Qty 3+	Qty 6+
110mm TH-2334	\$29.95	\$27.95	\$23.70

### 125MM - PRECISION LONG NOSE PLIERS

These quality pliers are made in Japan from the same high carbon steel that is used to make professional chef's knives. The pliers feature serrated jaws and a box joint to provide a precise action and strong grip. The coil spring ensures smooth, fatigue-free use. Insulated soft touch handles



ENGINEER®

CAT.	Qty 1+	Qty 3+	Qty 6+
125mm TH-1885	\$34.95	\$31.45	\$27.90

## Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

Catalogue Department - Jaycar Electronics:  
catalogue@jaycar.com

## CUTTERS & PLIERS SET

### STAINLESS CUTTER / PLIERS SET

Set of five 115mm cutters and pliers for electronics, hobbies, beading or other crafts. Stainless steel with soft ergonomic grips.

#### Contents:

- Flush cutters
- Long nose pliers
- Flat nose pliers
- Bent nose pliers
- Round nose pliers



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1812	\$29.95	\$27.95	\$23.70

## Tech Talk: When Stainless Steel Is Not The Best!

We are big fans of stainless steel. we love it in tools, fasteners & many building products. It is not, however, always the best material. top chefs will tell you, for example that the best knives are not stainless. they are made out of carbon steel.

Why? Carbon steel is far harder & tougher than stainless. The problem of course is that carbon steel will rust if not maintained. In our search for the best hand-tools we have decided to stock two very high quality Japanese-made products made out of carbon - steel. They are not cheap but they are for the professional user whose time is money. Like carbon steel knives, rust is not a problem if used constantly.

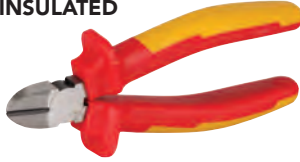
They will, however, pay you back every day because they will stand up to heavy wear & tear.

For those who have only occasional use for hand tools, we sincerely recommend stainless steel products.

To avoid confusion we have put a small logo "SS" nominating which tool is made out of stainless, and "CS" meaning carbon steel.

## ✓ PLIERS & CUTTERS

### 160MM (6") SIDE CUTTERS - INSULATED



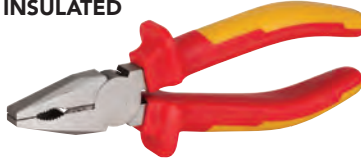
This drop forged alloy tool is made to the same standards as our TH-1984 combination pliers. It is just as tough and will also cut piano wire up to 1.6mm. This is a quality tool and designed for dedicated wire cutting. It has comfortable double inset handles.

- 160mm / 6" long



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1985	\$24.95	\$22.45	\$19.95

### 180MM (7") BULL NOSE PLIERS - INSULATED



Strong, Tough & Reliable. These high quality drop forged alloy steel pliers are a professional tool and manufactured to the rigid German DIN standards for electrical safety & mechanical strength. They are for serious tradesmen who need a quality tool. These pliers will cut hard (piano wire) wire up to 1.6mm & soft (annealed copper, aluminium silver etc.) up to 4.0mm. Non slip double inset handles are comfortable to hold.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1984	\$24.95	\$22.45	\$19.95

### 170MM (6.5") LONG NOSE PLIERS - INSULATED



You can see the quality German design in these strong and attractive pliers. They are drop forged to the same standards as the other tools in the range and have the same cutting capacity - up to 4.0mm electrical wire. A very attractive tool with comfortable handles. The high quality manufacture means they can take the work and last for ages. This could be the last pair of long nose general purpose pliers you need to buy!

- 70mm / 6.5" long

CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1986	\$24.95	\$22.45	\$19.95

## ✓ SPECIALTY PLIERS

### 175MM - SCREW REMOVING PLIERS

This tool is basically designed to remove, by brute force, a hopelessly stripped out head of any type of small non-countersunk screw. The secret is an oval-shaped serrated hole in the end of the plier. You place the plier over the head of the screw, grip and rotate the plier. This system applies a lot more torque to the head of the screw than a drill bit ever could. It's reminiscent of the plier that a dentist used to extract your tooth!! Its Japanese manufacturer has provided a beautifully made and finished product. Suitable for any screw in the range of 2.0 to 5.0mm or so, although it will work on larger screws to lesser effect

- 175mm long
- Soft grip handle



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-2330	\$24.95	\$23.35	\$19.70

### 75MM (3") SHEET METAL BENDING PLIERS

Bend sheet metal easily with this heavy duty offset hand tool. Features strengthened rivets and dual layered pitted handle for a firm grip.

- Jaw width: 75mm
- Jaw depth: 30mm
- Overall length: 210mm
- Thin gauge aluminium, brass, etc. ok

Not suitable for steel over 0.8mm thick.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-2336	\$24.95	\$22.35	\$19.70

## ✓ TWEEZERS

### ANTI-MAGNETIC PRECISION TWEEZERS

These are high quality tweezers made from anti-magnetic, anti acid steel. Perfect for handling SMD components, jewels or general electronic components.

- Length 110mm
- Supplied with protective nylon cap



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1754	\$4.45	\$3.95	\$3.45

### ESD SAFE TWEEZERS WITH LED ILLUMINATION

These precision tip tweezers are ideal for picking up tiny objects with the added benefit of a LED light to illuminate the item being handled. Ideal for working with SMD components or jewels they are ESD (Electronic Discharge) safe and have teeth on the tip to ensure reliable grip on items.

- Includes 3 x SR41 batteries
- Dimensions: 155(L) x 15(W) x 10(H)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1761	\$9.95	\$8.75	\$7.75

### STAINLESS STEEL TWEezer SET

A set of 4 tweezers, three supplied with vinyl handles, comprising:

- 1 x self closing pointed type
- 1 x long curved pointed
- 1 x long fine pointed
- 1 x flat spatula type

Approximate length 115mm.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1752	\$8.95	\$7.95	\$6.95

### STAINLESS STEEL TWEezer SET - ESD SAFE

A set of 3; duckbill head, angled fine and straight superfine enable you to manipulate surface mount components or other tiny items with ease. ESD coating on main body of tweezers greatly reduces static discharge issues.

- Measures: Angled & duckbill 120mm, superfine 135mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1760	\$19.95	\$17.95	\$15.95

## ✓ OTHER TOOLS

### INSPECTION MIRROR

Low cost inspection mirror. Ideal for looking into hard to get places

- Length: 160mm
- Mirror dia: 24mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1872	\$4.95	\$4.45	\$3.90

### FORCEPS (HAEMOSTATS)

These clamps are made of stainless steel and can be locked on to the item they are holding. They are 130mm long, so they are ideal to reach into hard-to-get-at places. Also great for holding components etc., whilst soldering.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1755	\$8.95	\$7.95	\$6.95



## ✓ SCREWDRIVERS

### HIGH QUALITY JEWELLER'S SCREWDRIVERS

Each screwdriver has a rotating top, larger handle and a strong chrome vanadium tip providing a comfortable finger/palm rest and an easily turned body. These look very similar to those expensive German ones.



TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
1.0mm Slot Tip	TD-2060	\$3.50	\$3.15	\$2.75
1.5mm Slot Tip	TD-2061	\$3.50	\$3.15	\$2.75
2.0 mm Slot Tip	TD-2062	\$3.50	\$3.15	\$2.75
#000 Phillips	TD-2064	\$3.50	\$3.15	\$2.75
#00 Phillips	TD-2065	\$3.50	\$3.15	\$2.75

### JEWELLER'S SCREWDRIVER SET

All metal precision screwdrivers for watchmakers, jewellers, modelmaking or just fixing the sunnies. Set of six.

- Slotted: 1.0, 1.2 & 1.6mm
- Phillips: #00, #0 & #1



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2023	\$9.95	\$8.75	\$7.75

### 6 PIECE INSULATED ELECTRONIC SCREWDRIVER SET

These screwdrivers have ergonomic handles with excellent non-slip grips. The shafts are fully insulated and rated for 1000V. The set contains all the smaller sizes you need for working on electronic gear. Storage case included.

- Slotted: 2mm, 2.5mm, 3mm
- Phillips: #00, #0, #1
- 1000V rated
- TÜV and GS approved
- Case: 192(L) x 130(W) x 26(H)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2026	\$19.95	\$17.95	\$15.95

## ✓ TOOL & WORKBENCH ACCESSORIES

### TOOL MAGNETISER / DEMAGNETISER

Magnetised screwdrivers make life easier. This tool has two slots, one which will magnetise and the other to demagnetise. The holes are large enough for the largest of screwdrivers.

- 50 x 50 x 30mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2042	\$6.95	\$6.25	\$5.50

### HANDY MAGNET STRIP

You'll find dozens of uses for this innovative magnetic storage system. It can be attached to walls, tables or other surfaces to hold tools, brushes, scissors, key rings or any other object that contains iron.

Tools not included.

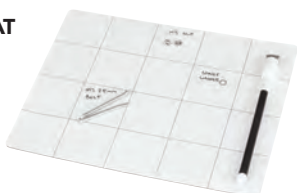


CAT.	Qty 1+	Qty 6+	Qty 20+
LM-1624	\$19.95	\$17.95	\$15.95

### MAGNETIC PROJECT WORK MAT

Holds small metal screws, nuts, and bolts so they don't roll off the desk as you work. No more hunting around for that small screw that fell on the floor as you work.

- Dimensions: 254(L) x 203(W)mm



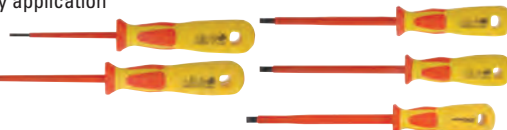
CAT.	Qty 1+	Qty 6+	Qty 20+
TH-1867	\$12.95	\$11.35	\$10.35

## Electrical Screwdrivers:

This range of trade quality insulated screwdrivers is one of the most comfortable screwdrivers we have ever used. The ergonomic handles have a soft rubber coating for a secure, comfortable grip that you can use for hours on end. All are TUV and GS approved and rated up to 1kV.

- A size for any application

### SLOTTED



WIDTH	LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
2.5mm	75mm	TD-2230	\$5.50	\$4.90	\$4.30
3.0mm	100mm	TD-2231	\$5.95	\$5.25	\$4.75
5.5mm	125mm	TD-2232	\$6.95	\$6.25	\$5.50
6.5mm	150mm	TD-2233	\$7.95	\$7.10	\$6.25
8.0mm	175mm	TD-2234	\$9.95	\$8.75	\$7.75

### PHILLIPS



SIZE	LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
0	60mm	TD-2235	\$5.95	\$5.25	\$4.75
1	80mm	TD-2236	\$6.95	\$6.25	\$5.55
2	100mm	TD-2237	\$7.95	\$7.10	\$6.25

### 7 PIECE SET

A quality set of 7 screwdrivers with storage box. GS & VDE tested & approved to 1000V. With red handles and insulation right to the tip.

- DIN EN 60900.

#### Flat:

1.2x6.5x150, 1.0x5.5x125, 0.8x4x100, 0.4x2.5x75

#### Phillips:

#2x100, #1x80, #0x75



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2022	\$34.95	\$31.45	\$27.95

## ✓ TEST SCREWDRIVERS

### "SMART" TEST SCREWDRIVER

- Capacitor check
- Diode check
- Transistor check
- Globe / relay / fuse / speaker / resistor check
- Locating broken wire
- Picks up static radiation of TV or monitor
- Instantaneously checks AC power
- Earth disconnection check
- AC voltages
- DC voltage test up to 250VDC
- Continuity check
- Polarity check 1.5V to 36VDC
- Supplied with comprehensive instructions



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2055	\$11.95	\$10.70	\$9.50

### LOW VOLTAGE CIRCUIT TESTER 6, 12, 24 VOLTS

Looks like a neon test screwdriver but instead of a blade on the end this tester has a probe and a 28" lead which clips to ground.

- Suitable for 6/12/24 volts for use on cars, trucks, boats, etc.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2049	\$3.95	\$3.45	\$3.15

## TOOL KITS

### 10 PIECE REINFORCED PLASTIC TOOL SET

A handy toolset that won't rust, so it's great for the toolbox, glovebox or tacklebox. Other benefits of these reinforced plastic tools include working on live (low voltage) circuits without chance of shorting if you slip, and preventing damage to the fasteners (screws & nuts) on your projects. You could even pack them in your cabin baggage if you travel. Supplied as a once piece mould - simply snap out the tools you need to use when you need them. See website for contents.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2116	\$4.95	\$4.45	\$4.00

### 35 PIECE ELECTRONIC TOOL KIT WITH VINYL CASE

A multi-purpose precision screwdriver tool set with a durable storage case with zipper. The tool set consist of 30 bits, cutters, pliers and a flexible shaft adaptor for those tricky to reach screws. Ideal for electronic service tradesmen and hobbyists.

#### Kit includes:

- 30 pcs assorted bits:
  - Slotted: SL1.0, SL1.5, SL2.0, SL2.5, SL3.0, SL3.5, SL4.0mm
  - Phillips: PH000, PH00, PH0, PH1
  - Pozi: PZ0, PZ1
  - Torx: T4, T5, T6, T7, T8, T9, T10, T15, T20
  - Hex: H0.7, H0.9, H1.3, H1.5, H2.0, H2.5, H3.0, H4.0mm
- Needle nose pliers, diagonal cutters, flexible shaft, stainless tweezers, easy grip screwdriver handle
- Durable zippered storage case
- Case dimensions: 180(L) x 125(W) x 30(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2117	\$39.95	\$35.90	\$31.90

### 30 PIECE TOOL KIT WITH CASE

Minor DIY repairs are a breeze with this 30 piece tool kit and every DIYer should have one of these in easy reach. The tools are held securely in a zip-up case

#### Contents:

- Side cutters
- Snap-blade knife
- Precision screwdriver with bits
- Driver handle with: PH1, PH2, PZ1, PZ2, 5, 6mm slotted, T10, T15, T20
- 5, 6, 7, 8, 9, 10mm sockets
- Folding Allen keys 1.5, 2, 3, 4, 5, 6mm
- Case measures: 210(L) x 160(W) x 48(H)mm
- Long nose pliers
- Tape measure



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2166	\$29.95	\$26.95	\$23.95

### 8 PIECE 1000V VDE SET

These rugged, quality hand tools are VDE rated to 1000V and GS approved. The set includes two Phillips and two slotted screwdrivers, long nose pliers and side cutters. They all feature quality rubber-moulded insulation so they're comfortable in-hand. For safety, the screwdrivers are insulated right to the tip, while the side cutters and pliers are flanged to keep them firmly in your hands. Also included is a mains test-lamp, and a small roll of PVC electrical tape. They're made with quality steel, so they'll be reliable job after job.

- VDE approved to 1000V
- Insulated right to the tip
- Includes low voltage circuit tester

#### Tools Include:

- 170mm Side Cutters
- 170mm Long Nose Pliers
- 140mm 250V Mains Tester
- #1 x 80mm Phillips Screwdriver (170mm Overall Length)
- #2 x 105mm Phillips Screwdriver (205mm Overall Length)
- 3.5mm x 105mm Slotted Screwdriver (195mm Overall Length)
- 5.0mm x 125mm Slotted Screwdriver (225mm Overall Length)



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2031	\$59.95	\$53.95	\$47.95

## SMARTPHONES & GAME CONSOLE TOOL KITS

### LCD SCREEN OPENING TOOL

If you're trying to open modern smart devices such as a Tablet or Smartphone, the right tool is essential. This pair of suction-pliers provide pressure to pop-open the case, allowing you to get access to the internal electronics and screen. Suitable for screen removal on many smart devices.

*Smartphone not included.*

Dimensions: 160mm long



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2121	\$14.95	\$13.45	\$11.95

### TOOL SET REPAIR KIT FOR IPHONE®

The tools you need to safely open up your iPhone® or iPad® and put it back together again. Replace cracked screens, dead batteries, scratched back panels and more. Suits iPhone® 3G, 3GS, 4, 4s, 5.

#### Contents

- 3 x iPhone® mounting panels with screw hole marks for iPhone® 4, iPhone® 4s, iPhone® 5
- 1 x Scraping plastic film
- 1 x Special tool for capacitive screens
- 1 x 0.8 Pentalobe screwdriver (for iPhone® 4 iPhone® 4s, iPhone® 5)
- 1 x 1.2 Pentalobe screwdriver (for iPad®)
- 1 x 1.2 Philips screwdriver (for iPhone® 3, and parts of iPhone® 4)
- 2 x Guitar pick opening tool
- 2 x Plastic prying tools



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2115	\$16.95	\$14.95	\$13.35

### 27 PIECE SMARTPHONE REPAIR KIT

A kit containing all the necessary tools you need to fix your Smartphone. This 27 piece Smartphone repair tool kit comes in a compact storage case with a hang tab to make sure that you don't misplace the kit after use. It is not limited to Smartphones either - it is designed to repair iMac®, Mac® air, iPhone®, Samsung®, HTC®, Nokia®, Sony® as well as many brands of mobile phone.

#### Kit includes:

- Aluminium alloy handle
- 18pcs for 4mm bits: PH000, PH00, PH0, PH1, SL1.5, SL2.0, SL2.5
- Torx: T4, T5, T6, T8, T10
- HEX1.5, HEX2.0
- Pentalobe 0.8, 1.2, 1.5
- Tri-Lobe #0

- Plastic prying tools x 2
- Extension bar
- Guitar pick opening tool
- Suction vacuum opener
- SIM card ejector pin tool

- Tweezers x2
- Soldering scraper tool
- Nylon ESD-safe probe with pointed and blade ends
- Dimensions: 190(L) x 130(W) x 26(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2118	\$29.95	\$26.95	\$23.70

### GAMING CONSOLE TOOL KIT

Everything you need to get into your console and accessories. It includes tools for pretty much every console and handheld on the market today - Wii®, X-Box®, Playstation® etc. Carry case included.

#### Contents:

- PH000, PH00, PH0, PH1
- Slotted 2, 3, 4mm
- T4, T5, T6, T8, T10, T15, T20
- TA2, TA2.3
- TRI00, TRI0, TRI1

- Nintendo® & X-Box® security bits
- X-Box® opening tool
- Stainless tweezers
- Ratchet handle and adaptor



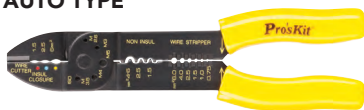
CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2109	\$29.95	\$26.95	\$23.95

## ✓ CRIMPING TOOLS - QUICK CONNECTORS

### 5 WAY CRIMPING TOOL - AUTO TYPE

This crimping tool will do the following:

- Cut wire
- Crimp insulated & non insulated terminals
- Strip wire with diameters 0.75, 1.0, 1.5, 2.5, 4.0 & 6.0mm
- Cut bolts with diameter M2.6, M3.0, M3.5, M4.0 & M5.0



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1828	\$8.95	\$7.95	\$6.95

### CRIMPING TOOL FOR NON-INSULATED LUGS

A quality tool at a budget price. Solid box joint and crimping dies, comfortable handles and spring-loading make this an easy crimper to use all day. It handles non-insulated lugs from 14-18 AWG and 22-26 AWG and also includes a built-in wire cutter.



	CAT.	Qty 1+	Qty 3+	Qty 6+
185mm long	TH-1834	\$14.95	\$13.35	\$11.70

### HEAVY DUTY RATCHET CRIMP TOOL FOR INSULATED TERMINALS

Manufactured from quality carbon steel and fitted with hardened and tempered jaws. Crimping pressure is precisely adjustable and a ratchet release lever is fitted to enhance safety. Has easy identification for crimping Red, Blue, and Yellow Terminals. Suitable for crimping insulated terminals from 0.5mm to 6.0mm in size.



	CAT.	Qty 1+	Qty 3+	Qty 6+
220mm	TH-1829	\$39.95	\$35.90	\$31.90

### AUTOMOTIVE CRIMP TOOL WITH CONNECTORS

Unlike other automotive crimp pliers, this excellent tool comes with 80 of the most popular automotive connectors and NOT a bunch of junk you will never use. The tool will cut & strip wire, crimp connectors and also cut a range of metric bolts.

Every car enthusiast should have one of these.

Included connectors:

- 8 each of male & female blue bullets
- 8 each of male & female red bullets
- 8 each of male & female blue spades
- 8 each of male & female red spades
- 8 x red eye connectors
- 8 x blue butt joiners



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1848	\$14.95	\$13.45	\$11.95

### RATCHET CRIMPING TOOL FOR NON-INSULATED LUGS

Very high quality with comfortable grip and ratchet mechanism to relieve strain on your hands. Ideal for anyone doing frequent or high volume crimping. The ratchet mechanism holds the crimper closed until complete, with a manual release when needed. The extra-long handle provides exceptional leverage, while the grips provide comfort for your hands. Suits (16AWG to 6AWG) 1.25 to 16mm non-insulated terminals. Ideal for crimping Anderson plugs up to 50A.

- Dimensions: 280(H) x 55(W) x 18(D)mm (Closed)



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1847	\$34.95	\$30.95	\$27.95

## ✓ CRIMPING TOOLS - COAX

### COMPRESSION CRIMPING TOOL - UNIVERSAL

A precision crimp tool ensuring correct crimping pressure is applied for reliable, trouble-free compression of BNC, RCA, Min-F and F-type coaxial connectors. Adjustable compression depth that provides desired crimping length.

- Works with RG59 and RG6 coaxial cables

*Note: This tool is not suitable for our PP-0708 Foxtel Approved F59 Plug.*



	CAT.	Qty 1+	Qty 3+	Qty 6+
146mm long	TH-1800	\$24.95	\$22.35	\$19.70

### COMPRESSION CRIMPING TOOL FOR F-TYPE PLUGS

A compact compression tool designed for our Foxtel approved F-type plug (PP-0708). A channel accurately positions the plug, and a spring-loaded clamp holds the cable in position. These features and leverage action of the handle ensure easy F-type compression crimps.



	CAT.	Qty 1+	Qty 3+	Qty 6+
143mm long	TH-1803	\$29.95	\$26.90	\$23.70

### COMPRESSION CRIMP TOOL FOR RCA / BNC / PAL / F-TYPE CONNECTORS

This crimp tool provides interchangeable dies to crimp RCA, BNC, PAL and F-Type connectors with ease. It's a durable tool that will provide a quality compression connection every time. Metal construction with comfortable grip.

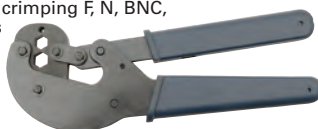
- Dimensions: 152(D) x 19(W) x 53(H)mm (Closed)



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1807	\$24.95	\$22.45	\$19.95

### HEAVY DUTY COAX CRIMPING TOOL

This tool is specifically designed for crimping F, N, BNC, TNC, UHF, ST, SC & SMA connectors onto coax cable for TV and communications applications. It also has adjustable crimp force and 3 hex dies: 2.54mm, 9.12mm & 10.3mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1832	\$29.95	\$26.95	\$23.95

### HEX RATCHET CRIMPING TOOL

Heavy duty ratchet tool designed for crimping F, N, BNC, TNC, UHF, ST, SC & SMA connectors onto RG6, RG58 or RG59 coax cable. It features adjustable crimping force and ratchet mechanism for complete repeatability. Four hex crimping dies: 1.72mm, 5.49mm, 8.23mm and 9.14mm.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1833	\$39.95	\$35.90	\$31.90

### RATCHET CRIMPING TOOL FOR F-TYPE CONNECTORS

A strong, heavy duty tool for crimping F-Type CATV connectors onto RG6 or RG59 coax cable. Ideal for cable TV or RF distributions system installers. The tool features a secure ratchet mechanism for accurate and reliable crimps.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1831	\$39.95	\$35.90	\$31.90

### RATCHET CRIMPING TOOL FOR BNC/TNC CONNECTORS

A heavy duty tool for crimping BNC/TNC connectors onto RG58/59/62 coax cable. The tool features a secure ratchet mechanism for accurate and reliable crimps.

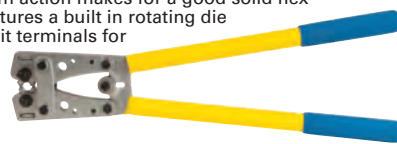


CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1846	\$39.95	\$35.90	\$31.90

### HEAVY DUTY TERMINAL CRIMPER

Commonly used for crimping lug/eye terminals onto heavy gauge power cables. The lever arm action makes for a good solid hex crimp on the terminal. Features a built in rotating die which can be rotated to suit terminals for 6/10/16/25/35/50mm<sup>2</sup> cable (10AWG-1/0AWG)

- Suits our PT-4934 to PT-4939 range of eye terminals
- 450mm long



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1849	\$49.95	\$44.90	\$39.90



## HEAVY DUTY CRIMP TOOL WITH QUICK INTERCHANGEABLE DIES

This heavy duty, ergonomic crimper allows you to quickly interchangeable the dies by hand, without the need for a screwdriver! Crimping is made easy with its ratchet mechanism designed for maximum power or quick release. Its ratchet release function allows for easy adjustment prior to completing the crimp, in case of incorrectly placed terminal. This crimper uses interchangeable dies (available separately) that can be quickly and easily changed. Buy only the ones you require for each job! Dies available for telephone and network plugs, insulated terminals, BNC/TNC connectors to suit RG58/RG59/RG62 coax, and even F-type CATV connectors to suit RG59/RG6 coax. An invaluable tool for the workshop or technician's tool-kit.



### DIES TO SUIT



	CAT.	Qty 1+	Qty 3+	Qty 6+
Heavy Duty Crimp Tool	TH-2000	\$39.95	\$35.95	\$31.95
6P6C RJ11/12	TH-2001	\$22.95	\$20.45	\$17.95
8P8C RJ45	TH-2002	\$22.95	\$20.45	\$17.95
Insulated Terminals	TH-2003	\$22.95	\$20.45	\$17.95
BNC.TNC RG58/59/62	TH-2004	\$22.95	\$20.45	\$17.95
F Connectors CATV RG6/59	TH-2005	\$22.95	\$20.45	\$17.95
Non-Insulated Terminals 26-18AWG	TH-2006	\$22.95	\$20.45	\$17.95
Non-Insulated Terminals 20-10AWG	TH-2007	\$22.95	\$20.45	\$17.95
SMA/Fibre Optic 1.09-6.48mm	TH-2008	\$22.95	\$20.45	\$17.95
SMA/Fibre Optic 1.07-4.52mm	TH-2009	\$22.95	\$20.45	\$17.95
PV Connector	TH-2010	\$29.95	\$26.95	\$23.95
Deutsch Die AWG 16/18/20 <b>NEW</b>	TH-2011	\$24.95	\$22.45	\$19.95

## ✓ CRIMPING TOOLS - MODULAR

### 6P/8P MODULAR CRIMP TOOL

This tool will crimp the following plugs: 6P2C, 6P4C - RJ12, 6P6C - RJ12, 8P - RJ45.

- It also cuts and strips the cable



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1935	\$19.95	\$17.95	\$15.95

### 4P/6P/8P/10P MODULAR CRIMP TOOL

This great tool will cut, strip and crimp flat telephone cable, or Cat5e type cable also. Constructed from high quality carbon steel, it features interchangeable dies and ergonomic design. It also has a brace to lock them closed.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1936	\$49.95	\$44.95	\$39.95

## ✓ CAT5 TOOLS

### CAT5 PUNCH-DOWN TOOL / STRIPPER

#### LOW-COST

This versatile little tool will strip wire up to 5 to 6.2mm diameter, and doubles as a punch-down tool for 110/88-type terminals, with blade. Made from poly-resin plastic, with steel cutters this lightweight tool could easily fit in the pocket or tool kit.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1738	\$8.95	\$7.95	\$6.95

### CAT5 PUNCH-DOWN TOOL - ADJUSTABLE

It has a turnable body, adjustable impact pressure and a storage compartment within the handle for holding a spare blade. Frame made of polyacetal resin with fibre glass orange handle. Supplied with 88 blade. Spare blades see TH-1743 below.

#### SPECIFICATIONS TH-1740

Impact pressure	Low: 10 +/- 2kg (standard wire)
High	15 +/- 2kg (larger wire)
Length of tool	152mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1740	\$22.95	\$20.35	\$18.35

### BLADES FOR CAT5 PUNCH TOOLS

Suits the punch tool - TH-1740. Made from hardened SNCM-21, these blades are both changeable and reversible, and can be changed by hand, no screwdriver necessary. Blade retaining pressure within 4-6 kg. One end of each blade has a cutter for that extra-neat termination, the other end is plain for those "linked" blocks.



	CAT.	Qty 1+	Qty 3+	Qty 6+
110 Krone	TH-1743	\$17.95	\$15.95	\$14.35

## ✓ F CONNECTOR TOOLS

### F CONNECTOR SEATING TOOL

This 3 way tool assists in the connection of F type connectors. Includes flaring tool for RG6 and RG59 cable and pre-threading tool. Measures: 60mm diameter



	CAT.	Qty 1+	Qty 3+	Qty 6+
Suits RG6/RG59	TH-1883	\$11.95	\$10.70	\$9.50

### F CONNECTOR SPANNER

Handy tool for tightening and loosening F-type connectors.

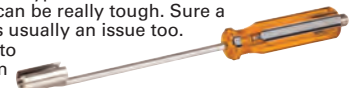


CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1811	\$2.95	\$2.65	\$2.35

### F-TYPE / BNC INSERTION & EXTRACTION TOOL

If you've ever tried to unscrew an F-Type or BNC connector that's been in-place for a while, you know it can be really tough. Sure a spanner might help, but access is usually an issue too.

This tool is specifically designed to allow you to insert them with firm torque for a quality connection, and a solid grip to unscrew the most stubborn plug too. Suits F-Type and BNC connectors.



#### SPECIFICATIONS

TD-2000	
Thread	3/8-32
Socket	7/16 Hex
Dimensions	255(L) x 25(Dia.)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2000	\$14.95	\$13.45	\$11.95



## ▼ CABLE STRIPPERS & CUTTERS

### BUDGET COAX CABLE STRIPPER

Strips insulation from any coax cable and ideal if you only need to strip coax occasionally. Simply insert the cable, twist and turn, then use the other end of the tool to remove the inner insulation.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1815	\$4.95	\$4.45	\$3.90

### POCKET WIRE STRIPPER

Strips anything from 2G to RG6 coax. Easy to use and small enough to take anywhere on the job.



	CAT.	Qty 1+	Qty 3+	Qty 6+
120mm long	TH-1817	\$14.95	\$13.35	\$11.70

### WIRE STRIPPER

Great way to strip all sorts of cable without damaging the conductors. Automatically adjusts to insulation diameter.

- One hand operation
- Spring return

FEATURES A FINGER GUARD



*Note: Colour may vary to one shown.*

	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1824	\$16.95	\$14.95	\$13.35

### ROTARY COAX STRIPPER

This handy stripper will strip the outside jacket and inner conductor in one operation.

- Suitable for RG58/59/62/6 and 3C2V 75 ohm cable
- Simply rotate the stripper clockwise around the cable 3 to 6 times. A quality stripper suited to installers



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1820	\$19.95	\$17.95	\$15.95

### STAINLESS STEEL WIRE STRIPPER / CUTTER / PLIERS

A high quality precision wire stripper and cutter that will strip wire sizes from 0.6mm to 2.6mm. It is spring-loaded with locking jaws, and has soft rubber handles for added comfort.

- Strips stranded wire from 12-24 AWG and solid wire from 10-22 AWG
- Includes wire cutter, pliers and loop hole to bend hooks in wires
- Will also cut steel wires up to 3.0mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
164mm long	TH-1841	\$15.95	\$14.35	\$12.70

### HEAVY DUTY WIRE STRIPPER / CUTTER / CRIMPER WITH WIRE GUIDE

Designed for easy wire stripping. The alloy steel can strip all types of cable from AWG 10-24 gauge (0.13 - 6.0mm), and the wire guide ensures the correct length is stripped time and time again. It incorporates a precision cutting blade for easy wire cutting. It also features quality crimping jaws. Capable of removing outer insulation from main T & E cable

- Insulated terminals (1.5 - 6mm)
- Non-insulated terminals (1.5 - 6mm)
- For auto ignition terminals (7-8mm)
- This is the best all round wire tool we've seen for a long time
- Spring return



	CAT.	Qty 1+	Qty 3+	Qty 6+
204mm long	TH-1827	\$29.95	\$26.95	\$23.95

## ▼ SHEARS & NIBBLING TOOL

### 180MM (7") HIGH QUALITY STAINLESS STEEL ELECTRICAL SHEARS

These precision spring loaded stainless steel electrical shears will cut soft wire up to 22mm<sup>2</sup> and make light work of cable ties, heatshrink, light hook-up wire and cable braid etc. Thumb operated lock to keep them closed when not in use.

- Ideal for cutting ribbon cable



*Also ideal for cutting HG-9985 Pressboard Insulation material. See page 45*

	CAT.	Qty 1+	Qty 3+	Qty 6+
180mm long	TH-1757	\$9.95	\$8.95	\$7.95

### 140MM (5.5") HIGH QUALITY ELECTRICAL SHEARS

These shears offer impressive cutting ability with finely honed and serrated blades. Great for cutting insulation, heatshrink, spaghetti and light duty hook-up wire.

- Shears feature insulated handles



*Also ideal for cutting HG-9985 Pressboard Insulation material. See page 45*

	CAT.	Qty 1+	Qty 3+	Qty 6+
140mm long	TH-1758	\$6.95	\$6.25	\$5.50

### 165MM (6.5") STAINLESS STEEL CABLE SHEARS

This set of cutters has a cutting capability of up to 10mm copper cable. It is constructed from stainless steel and has a hardened long-life cutting edge. For safety and ease of storage, it can be locked in the closed position.

- Stainless Steel & lightweight
- Lockable



	CAT.	Qty 1+	Qty 3+	Qty 6+
165mm long	TH-1898	\$19.95	\$17.95	\$15.95

### 300MM (12") COPPER CABLE SHEARS

These super heavy duty cutters feature a precision cutting head forged from carbon steel attached to drop forged steel handles for extra leverage. Designed to cut copper cable up to 35mm<sup>2</sup> you can slice through just about any cable up to 2 gauge. The handles are coated to prevent corrosion and have rubber grips for operator comfort.

- Dimensions: 300(L) x 90(W) x 40(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
300mm long	TH-1900	\$24.95	\$22.50	\$19.70

### MULTI FUNCTION CUTTER/STRIPPER TOOL

This ingenious 2-in-1 tool is the ultimate in space economy for your toolbox. On the one hand, it is a 6 position wire stripper suitable for 10 AWG to 20AWG insulated wire with a micro-grip jaw at the end. Then, just flip the handles around to turn it into a side cutter and crimper!



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1843	\$24.95	\$22.45	\$19.95

### NIBBLING TOOL

Will cut any shape out of aluminium, plastic, copper and other unhardened metals up to 18 gauge. Tool is designed to fit into the palm of your hand for easy use, simply drill a 1/4" hole to start.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1768	\$14.95	\$13.35	\$11.70

## ▼ ROTARY TOOLS & ENGRAVERS

### MICRO ENGRAVER

Engrave your valuables for security or insurance. The tiny diamond coated tip spins at 10,000 RPM so you can personalise tools, sporting gear, toys, security ID on valuables etc. Engraves glass, ceramics, metals and plastics. Batteries and case included.

- Tip is replaceable
- Dimensions: 160(L) x 15(Dia)mm
- Replacement tip sold separately CAT TD-2469



	CAT.	Qty 1+	Qty 3+	Qty 6+
Micro Engraver	TD-2468	\$24.95	\$22.35	\$19.70
Spare Tip	TD-2469	\$6.95	\$6.50	\$5.50

### 110 PIECE 12V ROTARY TOOL SET

Drill, saw, sand, polish, carve or grind in your workshop or out on the road. 110+ bits and attachments cover every possible task you'll ever need. The rotary tool is rated for 12V at 12,000 RPM. Ideal for hobby or professional use.



Rotary tool: 12VDC, 16W, 12,000 RPM

Attachments:

- Sanding belts 3 x 6mm
- 5 x Sanding Bands: 1/4" x 1/2"
- 6 x Sanding bands: 1/2" x 1/2"
- 4 x Collets: 1.6mm-2.3mm-3.2x2
- 1 x Dressing Stone 1"x 3/8"
- 1 x Felt Wheel Pointed: 3/8" x 3/4"
- 2 x Rubber Emery Wheel
- 4 x Felt Wheels: 1/2" x 1/4"
- 20 x Sand papers
- 2 x Felt Wheels: 1"x1/4"
- 1 x Cloth wheel 1"x 1/8"

- 2 x sanding shanks: 1/4"x1/2", 1/2"x1/2"
- 4 x HSS Twist drills: 1.6mm x 2, 2.3mm x 2
- 3 x Mandrels For Wheel
- 5 x Diamond cutters
- 2 x HSS cutter
- 9 x Grinding wheels with Shank
- 3 x Brush
- 30 x cut off wheels
- Heavy duty: 0.8mm
- 1 x Polishing compound
- 1 x mini engraver

See our website for a full breakdown of our Rotary Tool Kits.

	CAT.	Qty 1+	Qty 3+	Qty 6+
12V 110 Piece Rotary Tool Set	TD-2451	\$34.95	\$31.45	\$27.90

### 210 PIECE ROTARY TOOL KIT WITH FLEXIBLE SHAFT

Flexible shafts are particularly useful for porting heads in engines, but have a multitude of other applications where you need to get into a tight space or get more control of the bit. The kit consists of a powerful mains powered 32,000 RPM rotary tool that you can use with numerous attachments in the usual way, plus a 1m long flexible shaft. The flexible shaft attaches in seconds to give extra versatility. Suitable for modelmaking, automotive, workshop, art, jewellery or sculpture.



SPECIFICATIONS	TD-2459
Speed	10,000 - 32,000 RPM
Power	135 Watts@240VAC
Dimensions	210(L) x 52(Dia)mm
Shaft Length	1000mm

Attachments:

- Sanding arbours
- P80 sanding belts
- Sanding discs
- Collets: 2 x 3/32", 2 x 1/8"
- Drill bits: 2 x 1/16", 2 x 3/32"
- Grinding stones: 20 x 4mm wheel, 10 x 4mm wheel, 15 x 10mm cylinder, 12 x 10mm cylinder, 7 x 4mm cylinder, 20 x 10mm bullet, 11 x 8mm tapered bullet,
- Tungsten carbide burrs: 3mm straight, ball profiles
- Diamond coated burrs: 4mm ball, 2mm fine cone taper, 3mm pinecone, 4mm cone
- Polishing wheels: 12, 25mm
- Steel, fibre wire brushes
- 30mm cut-off wheels
- 20 x 4mm grinding wheels
- Paint-removing wheel
- 3/8" collet spanner, arbours, shafts, polishing compound



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
240VAC 210 Rotary Tool Set	TD-2459	\$54.95	\$49.45	\$43.95

## ▼ GLUE GUNS

### MINI GLUE GUN - 30W

A glue gun is a handy tool to have around the house. It's fast, easy and simple to use with trigger controlled glue feed. Suitable for toys and models, decorations, furniture, woodwork, cardboard, etc.

- Mains powered
- Requires 7mm diameter glue sticks (2 supplied)

Note: For intermittent use only.

Not for production use

#### GLUE STICKS FOR MINI GUN

To suit the mini glue gun.

- Dimensions: 7mm dia. x 100mm long
- Suits TH-1997 mini gun



	CAT.	Qty 1+	Qty 3+	Qty 6+
Mini Glue Gun - 30W	TH-1997	\$12.95	\$11.35	\$10.35
Glue Sticks Pkt 6 for Mini Gun	TH-1991	\$3.95	\$3.45	\$3.15
Glue Sticks Pkt 50 for Mini Gun	TH-1994	\$9.95	\$8.75	\$7.75

### LARGE GLUE GUN - 100W

#### GLUE STICKS FOR LARGE GUN

Great for quick and easy low stress repairs to timber, cardboard, paper and many household materials. It is fast, easy and simple to use with trigger controlled glue feed.

- Mains powered
- Requires 12mm diameter glue sticks (2 supplied)
- Note: For intermittent use only. Not for production use
- Dimensions: 12mm diameter x 100mm long
- Suits TH-1999 gun



	CAT.	Qty 1+	Qty 3+	Qty 6+
Large Glue Gun - 100W	TH-1999	\$19.95	\$17.95	\$15.95
Glue Sticks Pkt 6	TH-1995	\$4.95	\$4.45	\$3.90
Glue Sticks Pkt 45 approx	TH-1996	\$17.95	\$15.95	\$14.35

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store. \* Conditions apply.







## ANTI-STATIC PRODUCTS

Static control - both in the workshop/factory and in the field - is becoming increasingly important for reliable manufacture, repair and or installation of large surface mount LSI based boards. We offer a complete line of static control products for virtually any situation.

We offer a complete line of static control products for virtually any situation.

### CONDUCTIVE BRUSH

This brush looks very much like a toothbrush. The handle is made from conductive plastic, and the comb from conductive nylon. Use it to clean anything where static is a problem

- Resistivity: - 10KΩ - 10MΩ
- Length 178mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1775	\$9.95	\$8.75	\$7.75

### ANTI-STATIC WORKPLACE DESK MAT

This anti-static mat measures 555(W) x 290(D)mm and is ideal for anyone who manufactures, repairs or services sensitive electronic equipment. It is about 3mm thick, has a hard wearing face over a dense sponge rubber base. Can also be used as an anti-static base for computer keyboard.

- Top colour is grey
- See opposite for connecting leads



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1783	\$19.95	\$17.95	\$15.95

## SPECIALTY SCREWDRIVERS

### KEYRING SCREWDRIVER SET

This tiny key-size screwdriver set consists of a 5mm slotted driver, #2 Phillips driver and is small enough to be carried on your key ring, yet strong enough to loosen all but the toughest general purpose screws without damage. The drivers are made from chrome-vanadium steel and have a forged handle section that allows plenty of pressure to be applied to the job. Length 55mm.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2012	\$3.50	\$3.15	\$2.75

## POCKET TOOL

### MULTIFUNCTION POCKET TOOL

This handy little tool will fit in your wallet! It is the size of a credit card, made from stainless steel and features a can opener, screwdriver, ruler, bottle opener, 4 position spanners, saw blade, directional auxiliary indication and a lanyard hole. Is the ideal companion for camping, hiking, backpacking or just to keep handy for those MacGyver moments. Supplied with pouch.

- 68(L) x 45(W) x 2(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
TH-1838	\$4.95	\$4.45	\$3.95

## ELECTRIC SCREWDRIVERS

### 102 PIECE ELECTRIC SCREWDRIVER KIT

Features a powerful high torque electric driver and a massive array of stainless steel bits that are sure to get the job done. All packaged in a tough aluminium carry case that will hold and protect your screwdriver, mains charger, and all the bits.

- Screwdriver dimensions: 144(L) x 135(H) x 40(W)mm
- Case dimensions: 250(L) x 153(H) x 88(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2491	\$49.95	\$44.95	\$39.95

### ANTI-STATIC WRIST STRAP

Use when static electricity is a problem when soldering, changing ICs and installing expansion cards in computers etc. Static charges can destroy ICs instantly. Consists of adjustable hook and loop wrist strap, coiled lead and banana plug/alligator clip. Expanded lead length about 1.8m.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1780	\$13.95	\$12.35	\$10.95

### ANTI-STATIC WRIST STRAP

Similar to the unit above, this strap has an extra long coiled lead of 3m/10ft extender. This makes it ideal for moving about your workbench without having to unclip yourself to do so. An elasticised wrist strap is also included, along with banana plug/alligator clip.

- Colour may vary

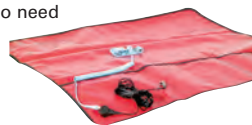


CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1781	\$17.95	\$15.95	\$14.35

### ANTI-STATIC FIELD SERVICE MAT / BAG

This mat is ideal for field service people, who need an anti-static work area when on the move. The mat folds out to a work area of approximately 600 x 600mm. At one end there are 2 pouches, and a ground lead and wrist strap are included. A very useful tool.

- Pouch size approx: 200 x 300mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1776	\$39.95	\$35.95	\$31.95

## SPIRIT LEVEL

### KEYRING SPIRIT LEVEL

Handy spirit level that attaches to your keys.

- Dimensions: 30(L) x 10(W) x 10(D)mm



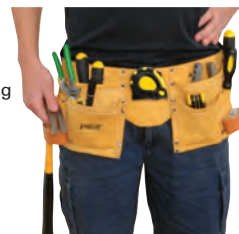
CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1931	\$4.95	\$4.45	\$3.90

## TOOL BELT

### PROFESSIONAL LEATHER TOOL UTILITY BELT

Strap this to your waist to keep your most used tools on you at all times. The belt size is fully adjustable and features a number of pockets and 2 leather loops suitable for carrying a hammer, measuring tape and more.

- 2 large main pockets
- 2 front stitched pockets
- 6 small pockets
- 2 leather hammer loops
- Adjustable web belt with buckle



Note: Tools and accessories not included"

CAT.	Qty 1+
HB-6373	\$4.95

## TAPE MEASURE

### 1M KEY CHAIN TAPE MEASURE

A handy retractable tape measure to take wherever you go. Durable yellow ABS body with a soft black rubber surround for comfort and grip. Small enough to keep in your pocket or clip to a set of keys.

- Measuring length: 1m
- Scale: Metric & Imperial
- Lockable
- Dimensions: 40(H) x 40(W) x 13(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-2500	\$2.95	\$2.60	\$2.30



## DRIVERS & BIT SETS

### BLANK HEX DRIVER FOR INDIVIDUAL SCREW BITS

Use this driver with the bits supplied in our TD-2035 bit sets on the right. It will accept any hex bit in our range and features non-slip rubber handle with magnetic chrome vanadium 50mm long shaft.



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
160mm	TD-2032	\$6.95	\$6.25	\$5.50

### 7 PIECE HEX NUT DRIVER SET

A useful set of hex nut drivers with deep sockets that allow a generous length of thread to protrude through the nut you are tightening. Sizes supplied are M3, M3.5, M4, M4.5, M5, M5.5, and M6. A plastic storage pouch keeps the set together.

• A quality Japanese product



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2339	\$29.95	\$26.95	\$23.95

### THE POWER DRIVER BIT SET - 32 PIECES

The set consists of 32, yes 32 of the driver bits that you don't normally see. You don't get any slotted, Phillips or Pozidriv™ bits.

- 4 x Tri - wing, size 1, 2, 3, 4
- 9 x Torx (tamperproof), size T8, T10, T15, T20, T25, T27, T30 and T35
- 4 x Pin drive (snake), size 4, 6, 8 and 10
- 6 x In - Hex (allen), \*metric, size 2, 2.5, 3, 4, 5 & 6
- 6 x In - Hex (allen), \*imperial size 5/64", 3/32", 7/64", 1/8", 9/64" and 5/32"
- 3 x Torque Set, size 6, 8 and 10

With this you get a hex driver with magnetic retainer, all in a nifty plastic - rubber holder that is smaller than a deck of cards! (67 x 45 x 30mm).

\*Tamperproof Torx works as normal Torx as well.

\*Tamperproof In - Hex drive type



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2035	\$16.95	\$14.95	\$13.45

### 100 PIECE DRIVER BIT SET

The ultimate driver bit set includes:

- 1 x magnetic bit holder
- 1 x square to hex socket driver 50mm
- 1 x square to hex socket driver 25mm
- 1 x square to hex bit adaptor

#### Driver bits:

- Phillips # 0, 1, 2 (x5) & 3
- Pozidriv™ # 0, 1, 2 (x5) & 3
- Square drive # 0, 1, 2 & 3
- Slotted 3, 4, 4.5, 5, 5.5, 6, 6.5, 7 & 8mm
- Pin drive (snake) # 4, 6, 8 & 10
- Torque Set # 6, 8 & 10
- Torx T8, T10, T15, T20, T25, T27, T30, T40 & T45
- Tamper proof Torx (Metric) T8, T10, T15, T20, T25, T27 & T30
- Hex (Allen) Metric 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0 & 8.0mm
- Tri-Wing # 1, 2, 3 & 4
- Clutch drive # 1, 2 & 3
- Hex (Allen) Imperial 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32 & 1/4"
- Spline drive M5, M6 & M8
- Tamper Proof Allen (Metric) 2.0, 2.5, 3, 4, 5 & 6mm
- Tamper Proof Allen (Imperial) 5/32, 9/64, 1/8, 7/64, 3/32 & 5/64"
- Wing nut driver
- All in a snap lock case with clear markings to show where each bit rests

Note that commonly used driver bits are supplied in greater numbers.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2038	\$24.95	\$22.45	\$19.95

### Automatic Account:

For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.

## PRECISION DRIVER SETS

### 5 PIECE TORX SET

Easy to use colour coded Torx screwdrivers in a plastic case. Each screwdriver has a swivel head for easy use. Blade length is 20mm and torx sizes are T6, T7, T8, T9 & T10.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2070	\$12.95	\$11.35	\$10.35

### 6 PIECE PRECISION TAMPERPROOF TORX SET

A quality set of chrome vanadium drivers consisting of T7, T8, T9, T10, T15 and T20. All drivers are 145mm length & presented in a felt-lined plastic case.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2021	\$19.95	\$17.95	\$15.95

### 12 PIECE KEYCASE MINI DRIVER SET

12 mini bits & driver in a key-sized storage case.

- Flat: 1.5, 2, 2.5mm
- Phillips: 0, 00, 000
- Torx: T5, T6, T7, T10
- TN8, Hex 2.5mm
- Case size: 95(H) x 60(W)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2105	\$18.95	\$17.05	\$15.15

### 32 PIECE PRECISION DRIVER SET

High quality driver set with all those really small bits. Tactile handle with hardened hex shaft from 140 to 210mm. Ideal for jewellery, model making or electronics.

Storage case included.

Slotted: 1, 1.5, 2, 2.5, 3, 3.5, 4mm

Phillips: 000, 00, 0, 1

Pozidriv: 0, 1

Torx: T4, T5, T6, T7, T8, T9, T10, T15, T20

Hex: 0.7, 0.9, 1.3, 1.5, 2, 2.5, 3, 4mm

Case: 157(L) x 100(W) x 27(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2106	\$18.95	\$16.95	\$14.95

### 15 PIECE MICRO DRIVER SET

This handy set comes with all those microscopic fasteners we come across in modern electronics. The ergonomic handles are colour coded and they come in a sturdy storage case.

Slotted: 1mm, 1.4mm, 1.8mm, 2.4mm

Phillips: #000, #00, #0, #1

Torx: T5, T6, T7, T8

Hex: 1.5mm, 2mm, 2.5mm

Drivers: 105mm long

Case size: 192(L) x 130(W) x 26(H)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2069	\$24.95	\$22.35	\$19.70

### 22 PIECE LONG BIT SCREWDRIVER SET

Tackle a wide range of fastening scenarios using our compact screwdriver set comprising a selection of popular slotted, Phillips, Star and TRI bits, packed away neatly inside a handy storage case.

Slotted: SL1.5, SL1.7, SL2.0, SL3.0 and SL4.0.

Phillips: PH000, PH00, PH0, PH1 and PH2

Star: T5, T6, T7H, T8H, T9H, T10H, T15H and T20H

TRI: 2.5, 3.0

Pentagonal: 1.6 / Pin drive (snake): SP2



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2114	\$34.95	\$31.45	\$27.90



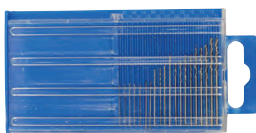


## ✓ DRILLS & DRILL SETS

### 20 PIECE MICRO DRILL SET 0.3 - 1.6MM

20 micro drills in an indexing storage case, ideal for drilling wood, composites, plastic or soft metals. Indexed case enables removal of the bit you want without the risk of spilling them all over the place.

- Sizes: 0.3, 0.35, 0.4, 0.45, 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95, 1.0, 1.2, 1.3, 1.4, 1.6, 1.6mm
- Case size: 130(L) x 70(H) x 8(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2406	\$12.95	\$11.35	\$10.35

### 31 PIECE MINI TAP & DIE SET

This 31 piece set is for the ultra small screws found in electronics. The kit consists of 9 metric screw cutting dies: 1.0, 1.1, 1.2, 1.4, 1.6, 1.8, 2.0, 2.2 & 2.5mm types in high speed steel and 18 equivalent taps in the same sizes above but with a taper and a plug version of the tap. There are 2 die liners to accommodate the smaller dies in the stock supplied. You will love this rare product. Supplied in a see-through plastic case which securely holds all parts.

- Dimensions: 83(W) x 153(L) x 12(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2443	\$74.95	\$67.45	\$59.95

### PCB DRILL CHUCK

This chuck will allow you to use drill bits from 0.6mm up to 2mm on your normal drill / cordless drill / power screwdriver or screwdriver which accepts standard hex bits.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2010	\$9.95	\$8.75	\$7.75

### PIN VICE

A handy addition to any tool case. All metal construction with two internal collars. The head rotates freely making it ideal for drilling delicate PCBs or plastic cases.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1772	\$13.50	\$11.95	\$10.70

### SPIRAL DRIVE DRILL / DRIVER

This unit is reminiscent of drill/drivers of 50 years ago (before cordless drills). The unit consists of a collet-type chuck and handle with a spiral shaft. Pushing the handle towards the job causes the collet to rotate. This would enable a drill (or screwdriver bit for that matter) to very gently and slowly rotate. It is ideal for very fine work and does need some practice to perfect your technique.

- Includes 2 pin vice collets: 0.3-1.0mm & 1.8-2.6mm
- Also 3 small drill bits in tubular case
- Dimensions: 180(L) overall (uncompressed) x 15(Dia.)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2089	\$17.95	\$16.15	\$14.35

### 4 PIECE COUNTERSINK SET

The easy way to deburr or countersink. Simply drill hole, insert tool with appropriate bit, and turn for a countersunk angle of 90°. Bits include 12, 16 and 19mm - all hardened carbon steel.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2027	\$13.95	\$12.35	\$10.95

## Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.

## ✓ DRILLING ACCESSORIES

### DRILL ASSISTANT WITH LASER LEVELLER

Drill holes in walls easily, on the level and with no mess. This drill assistant uses vacuum suction to attach to virtually any wall without leaving marks, and features float levels and a laser to ensure the hole you are about to drill is in the right position. There's even a compartment that captures the dust to avoid it falling to the floor.

- Vacuum Suction
- Built-in Laser
- Built-in Level
- Drill guide
- Dust catcher
- Requires 2 x AA batteries
- Dimensions: 238(L) x 100(W) x 48(H)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2151	\$19.95	\$17.95	\$15.95

### UNIVERSAL DRILL PRESS STAND

Convert your standard power drill or rotary tool into a drill press with this adjustable stand. Substantially cheaper than purchasing a full drill press, the stand still has all the necessary features expected in a full size press. It includes separate adjustments for limiting press depth and drill height so you can change drill position with minimal risk of over-drilling into the stand. The drill collar can be adjusted to suit a variety of tools. Heavy duty cast metal base and frame provides excellent stability.

- Allen key supplied for tightening drill collar
- Drilling depth: Up to 60mm
- Maximum collar diameter: 43mm
- Minimum collar diameter with insert: 35mm
- Dimensions: 497(H) x 350(W) x 160(D)mm



Note: Drill not included

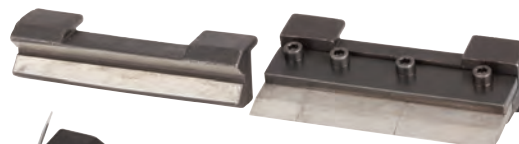


CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2463	\$39.95	\$35.90	\$31.90

### SHEET METAL BENDER - PAN BRAKE STYLE (VICE BREAK)

This unit sits in the jaws of your bench vice (100mm+ recommended). It retains itself in the vice with strong recessed magnets. One half consists of the familiar blade that bends the sheet metal. The other half in the 90 degree recess that the blade pushes into. By carefully positioning the sheet, you can perform a perfect 90 degree bend as good as a workshop! The blade is segmented, just like a workshop pan brake, so that you can make partial bends. With a little practice, you will be able to fabricate brackets, small boxes & other metal assemblies like a pro. Warning: This unit is not particularly cheap. It is, however, very well made. It is cast steel with tool steel pressing components. You need it to be sturdy, otherwise it would break or flex. It will, literally, last a lifetime. Will fold sheet up to 125 wide, however there are 3 x press segments 2 x 50mm, 1x25mm and these are independently removable by Allen head set screws. Depending on the width of the material you could easily bend steel strips up to 4mm thick and 25mm wide. Aluminium should not be a problem up to 4mm thick & 100mm wide, depending on your vice.

- Dimensions: 125(L) x 30(W)mm both halves



See page 225 for Metal Bending Pliers.

CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1763	\$79.95	\$71.95	\$63.95





## BENCH VICES & ACCESSORIES

### MINI BENCH VICE

This sturdy lightweight vice will clamp to surfaces up to 1" thick and hold material up to 2" thick. This handy tool is ideal for hobby work or as a light duty workshop bench vice. Made from strong, lightweight aluminium that won't rust or corrode, the vice will be a useful addition to anyone who needs a third hand!

- Vice jaws are 63.5mm wide and will open to more than 50mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1764	\$14.95	\$13.35	\$11.70

### 270° ROTATION CLAMP VICE

Rotate the head through 270° to make your work easier. The base will clamp to any bench or table up to 55mm thick and the 40mm jaws will take a job up to 58mm in size. Once in position, the head is easily fixed in position with a quick release lever.

- Base: 115(W) x 94(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1769	\$32.95	\$29.95	\$26.35

### VACUUM BENCH VICE - 75MM JAW

This quality vacuum vice is made from hard-wearing diecast aluminium. The vice consists of three-pieces; a vacuum base, ball joint clamp and a 75mm opening jaw with removable soft rubber jaw covers. The 'V' grooved jaws are ideal for holding cylindrical and irregular shapes, making it well suited to small bench jobs such as model building, jewellery making and general PCB/chassis work. The multi-positional ball swivel allows the jaws' working position to be varied through a full 360° axis.

- Stands approximately 160mm tall



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1766	\$39.95	\$35.90	\$31.90

## WORKSHOP TOOLS

### SOLDERING HEATSINK / COMPONENT HOLDER

This quality small tool is ideal as a heatsink when soldering to remove some of the heat from the semiconductor/component while soldering. It can also be used to hold small parts while soldering to avoid burnt fingers. Supplied with insulated handles, and length is 65mm.



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2122	\$7.95	\$7.10	\$6.25

### PLCC EXTRACTOR

There's really only one way to remove a PLCC chip safely - and this is it. Basically a spring assisted clip carrier extractor, specifically designed to see safe and hassle free removal of PLCC's from sockets.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1816	\$13.95	\$12.35	\$10.95

### IC EXTRACTOR 8 - 40 PINS

Deceptively simple looking device. One piece metal construction. 8 - 40 pins.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1818	\$7.95	\$7.10	\$6.25

### BUDGET SMD VACUUM PICK UP TOOL

Budget SMD component pickup tool. This handy workshop SMD component pickup tool fits into your pocket and uses vacuum pressure to pick up your sensitive components without damaging them. An amazingly useful tool!

- Easy to use, one-hand operation.
- Picks up to 50g in weight.
- Supplied with 3 vacuum pads.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1978	\$17.95	\$15.95	\$14.35

### 4 PIECE MINI PICK & HOOK SET

These hook tools have stainless steel heat treated points, and are ideal for use on O-rings, springs, snap rings, washers, checking soldering joints, general hobbyist kit building, and probing into things, etc.

Hooks are: Straight pick, 90° hook, full hook, small angle hook.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1762	\$15.95	\$14.35	\$12.70

### PEARL CATCH

Incredibly handy tool for those moments when you need to pick up small fiddly bits and pieces.

- Will clip to and hold small nuts, bolts, washers, transistors, resistors, etc
- Metal



construction	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1842	\$9.95	\$8.75	\$7.75

### SUPER EXTENSION CLAW & MAGNETIC PICKUP

Actually two tools. Tool No. 1 is a 600mm long flexible syringe-action claw gripper similar in operation to a pearl catch. The 4 prong gripper will capture an object up to 15mm in diameter with about 500g of gripping force. It is ideal for retrieving, say, a nut or screws in an engine compartment or piece of equipment. Tool No. 2 is the same thing except that it has a magnet on the end instead of a claw. We sell them as a set because they complement each other.



CAT.	Qty 1+	Qty 6+	Qty 20+
TH-1868	\$7.95	\$7.15	\$6.35

### MAGNETIC PICKUP TOOL WITH CLAW AND LED

These are a must for any workbench or toolbox. We've all dropped screws and tools into hard-to-reach places by accident, and retrieval can be a painful process. This device has a claw and magnet on the end of a 60cm spring-steel shaft, so you can work it into the strangest of places. A small LED also helps you see what you're doing! Exceptionally useful.

- Magnetic tip with claw
- Flexible spring steel shaft
- LED illumination



SPECIFICATIONS	TH-1864
Batteries	3 x LR44 (Included)
Weight	90g
Dimensions	60cm

CAT.	Qty 1+	Qty 6+	Qty 20
TH-1864	\$14.95	\$13.45	\$11.95

### SCRIBER

This pen type tool will scribe on metal, glass, plastic, ceramics and tools. Stylus is made of tungsten steel. Looks like a pen, and has a pocket clip

- Length 110mm



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2120	\$7.95	\$6.95	\$6.25

### AUTOMATIC CENTRE PUNCH

This handy tool allows you to make a centre punch mark with one hand. You simply hold the unit against where you would want a centre punch mark, apply downward pressure until the internal hammer mechanism trips. The pressure is adjustable, depending on the hardness of the surface. Sturdy brass body with hardened steel centre punch. 125mm long overall.

- Sometimes called a prick-punch



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1770	\$7.95	\$6.95	\$6.25



## MAGNETS

### LARGE RARE EARTH MAGNETS - PAIR

These rare earth magnets are exceptionally strong. They are made from NdFeB (Neodymium Iron Boron), providing the highest available magnetic energy of any material. Suitable for a wide variety of applications where a very strong magnet is required. The nickel casing protects the magnets because the material is very brittle.

- Sold as a pair
- Dimensions: 19mm dia x 28.2mm long
- Grade: NdFeB, N35
- Coating: Nickel



	CAT.	Qty 1+	Qty 6+	Qty 20+
Pair	LM-1652	\$29.95	\$26.90	\$23.70

### FERRITE MAGNETS

Ideal for hobby and craftwork, school projects etc. Can be glued to wood, plastic rubber etc.

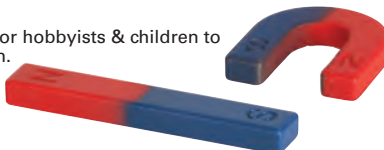


	CAT.	Qty 1+	Qty 6+	Qty 20+
10L x 10W x 4Dmm - Pkt 12	LM-1616	\$6.95	\$6.25	\$5.50
20L x 15W x 5Dmm - Pkt 6	LM-1614	\$6.95	\$6.25	\$5.50

### MAGNET BARS

Educational magnets. Ideal for hobbyists & children to learn more about magnetism.

- Each end is marked with "N" or "S"



	CAT.	Qty 1+	Qty 6+	Qty 20+
Bar Magnet - 70L x 12W x 5Dmm	TH-1874	\$1.95	\$1.75	\$1.55
U Shaped - 30mm x 30mm	TH-1873	\$1.95	\$1.75	\$1.55

### RARE EARTH MAGNETS WITH MOUNTING HOLES

Super powerful rare earth magnets with 4.5mm countersunk mounting holes so you can fix them to your project to latch a door closed, etc.



	CAT.	Qty 1+	Qty 6+	Qty 20+
Round 25(dia) x 5mm	LM-1626	\$18.95	\$16.95	\$14.95
Rectangle 50(L) x 20(W)mm	LM-1628	\$24.95	\$22.35	\$19.70

### RARE EARTH MAGNETS

These magnets feature rare earth compounds combined with ferrite (anisotropic) to produce incredibly strong attraction/ repulsion. They are encased in nickel jackets because the material itself is very brittle. We warn you that getting a finger between these could result in a nasty pinch! They are provided with a nickel plated iron "keeper".



	CAT.	Qty 1+	Qty 6+	Qty 20+
Small - 10mm dia x 3mm - Pkt 4	LM-1622	\$13.95	\$12.35	\$10.95
Medium - 25mm dia x 5mm - Each	LM-1618	\$17.95	\$15.95	\$14.35

### FLEXIBLE ADHESIVE MAGNETIC RUBBER STRIP

This self adhesive magnetic rubber strip can be cut down to suit an application and makes an ideal fridge magnet for adhering to promotional material such as menus, calendars etc.

- Dimensions: 15(W) x 500(L)mm
- 2mm thick



	CAT.	Qty 1+	Qty 6+	Qty 20+
	LM-1612	\$5.95	\$5.25	\$4.75

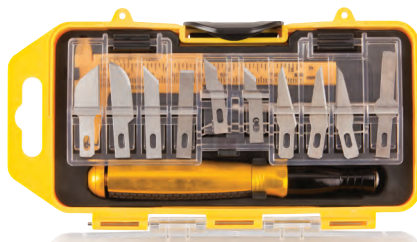
## KNIVES

### 14 PIECE PRECISION HOBBY KNIFE SET

Handy hobby tool set comprising of 10 different blades, handle, 70mm long tweezers, 90mm long flat screwdriver and vernier calipers, which measure up to 81mm (3.1inches).

#### Blades included:

- 1 x #1
- 1 x #4
- 1 x #7
- 1 x #10
- 3 x #11
- 2 x #12
- 1 x #17



- Case dimensions: 170(W) x 85(W) x 35(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Hobby Knife Set	TH-1916	\$19.95	\$17.70	\$15.70
Spare Blades - 10 Per Set	TH-1917	\$5.95	\$5.25	\$4.75

### ARTWORK KNIFE

Light duty precision knife with safety cap. Ideal for fine angle

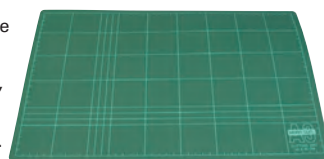
cuts, etching, hollowing, scoring, scraping, scribing, stripping and trimming. Four piece jaw chuck method of blade retention.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Knife	HG-9955	\$4.95	\$4.45	\$3.90
Blades Pkt 5	HG-9956	\$3.95	\$3.45	\$3.15

### BENCHTOP WORK MAT

Protect your benchtop. This durable A3 size PVC cutting mat is just the thing to protect your work benchtop. You can cut on it, solder, write on it, and not damage your workplace. The mat is 3mm thick, and measures 450 x 300mm.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	HM-8100	\$12.95	\$11.35	\$10.35

## FILES

### FILE SAW

Great for cutting odd shapes in plaster, PVC pipe, PVC sheeting, leather, plastic and many other soft materials. The blade measures 175mm long and the large, easy grip handle is 120mm long. Not to be used as a nerve broach or other dental work.



	CAT.	Qty 1+	Qty 3+	Qty 6+
File Saw	TH-2127	\$15.95	\$14.35	\$12.70

### DEBURRING TOOL

Clean up the edges of a hole. Suitable for steel, plastic, wood etc. Blades are fully ground for safety. SK2 steel blades are hardened to HRC64. Supplied with spare blade. Will deburr virtually anything.



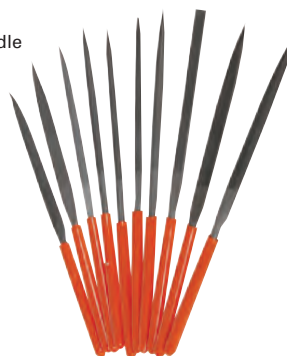
	CAT.	Qty 1+	Qty 3+	Qty 6+
	TH-1845	\$9.95	\$8.75	\$7.75

### 10 PIECE NEEDLE FILE KIT

Every toolbox should have a set of needle files. This set contains every profile you could ever need. All have integrated plastic handles and come in a handy storage wallet. Each is 162mm long.

#### Profiles:

- Round
- Elliptical
- Half-round
- Double half round
- Triangle
- Square
- Flat
- Flat tapered
- Knife
- Flat tapered safe back



	CAT.	Qty 1+	Qty 3+	Qty 6+
10 Piece	TD-2128	\$14.95	\$13.35	\$11.70

## ▼ SPANNER AND ALLEN KEY SETS

### 10 PIECE SPANNER SET FOR ELECTRONICS

Ideal mini spanner set. Set of 10 pieces, open end/ring combination. Suitable for light hobbyist use.

- Sizes supplied are: 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10 & 11mm
- Supplied in a plastic wallet



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1910	\$24.95	\$22.45	\$19.95

### 25 PIECE ALLEN KEY SET

25 different size Allen keys in a plastic wallet. Both metric and imperial sizes.

- Metric: 1.27, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 8.0, 10.0mm
- Imperial 3/8, 1/4, 7/32, 3/16, 5/32, 9/64, 1/8, 7/64, 3/32, 5/64, 1/16"



CAT.	Qty 1+	Qty 3+	Qty 6+
TD-2052	\$11.95	\$10.70	\$9.50

## Tech Talk: Allen Keys Adapted To Cordless Drill Use

Allen keys are very common these days and small sets like the one above are really quite inexpensive. The boss here has a set where he has cut off the short return piece of the Allen key with an angle grinder. The Hex bit then fits conveniently into the chuck of the cordless drill.

The low speed setting on a typical "cordless" is generally more than enough torque for most jobs. It's a great way to assemble flat-pack furniture & saves wear & tear on your fingers.

## Watch Repair Tools:

Jaycar has been fiddling with micro tools for years now, from tiny jewellers screwdrivers to small spanner sets to tiny table mounted vices etc. We have discovered a source of reasonably priced watchmakers' tools (real; pull-watches-apart-tools.) Here they are, folks. We expect them to be popular; they are Jaycar kind of products.



### 2 PIECE WATCH CASE OPENER SET

This set consists of an adjustable opener that engages the little recesses on the back of a watch. You can adjust the removing lugs very accurately to get a tight fit - absolutely essential. The other half of the set looks like a small oyster shucking knife (Appropriate when you think about it!). It is just fine enough to get into that tiny groove that some of the older watch covers have.

- Can open cases 6 - 50mm diameter



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1929	\$24.95	\$22.45	\$19.95

### 4 PIECE WATCHMAKERS' KIT

Central to this kit is the hand held watch case opener/holder. It has a screwadjustable case retainer with a very large selection of retaining lugs - indeed 18 in all, some the same. Also included as a large dusting bulb pump, No. 7 tweezers and fine dusting brush. You will be delighted with this set.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1932	\$34.95	\$31.45	\$27.90

### WATCHMAKERS MALLET WITH INTERCHANGEABLE HEADS

This unit weighs almost 90 grams and is 185mm long. It features 6 different heads, 4 steel ones, a brass one and acrylic plastic one. It seems that even in watchmaking you need a "persuader". Ball pein on the opposite end.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1927	\$14.95	\$13.45	\$11.95

### WATCH BRACELET LINK REMOVAL PLIERS

This tool enables you to remove and reinstall the fiddly little bracelet pins, so necessary when the bracelet band is new and generally too big for the wearer. It comes with a 1.0mm and 0.8mm pin removal insert.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1923	\$39.95	\$35.90	\$31.90

### WATCH CASE HOLDER

The sturdy, but adjustable frame has 4 nylon retaining posts to enable a good safe grip on the watch case. The frame could then be held in a vice, freeing up your hands.

*Note: Watch not included.*



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1934	\$15.95	\$13.95	\$12.45

### WRIST STRAP SPRING BAR ASSORTMENT

This is a must. A selection of the little spring bars that get broken/bent/lost even by the most careful wearers. This set frees you from the tyranny of the watchmaker. One use will pay for the cost of the whole set. The assortment consists of a total of 360pcs of the most common sizes: from women's 8mm to men's 25mm. All 1.5mm Dia. In detail the set includes 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24 & 25mm types. Has single sided spring bar and double sided types. Supplied in quality compartment case.



CAT.	Qty 1+	Qty 3+	Qty 6+
TH-1928	\$24.95	\$22.45	\$19.95

### PIN EXTRACTOR PRESS

A handy little pin-extractor/inserter press with a 0.8mm punch. Mainly intended for taking links out of watch bands, but endless other uses for jewellery making, modelmaking and hobbies.

- 2 spare pin punches
- Assortment of 12 pins



*See our Mini HSS Tap & Die Set on page 234*

CAT.	Qty 1+	Qty 3+	Qty 6+
TH-2014	\$10.95	\$9.85	\$8.75





## ULTRASONIC CLEANERS

### DOMESTIC ULTRASONIC CLEANER

Suited to domestic use this ultrasonic cleaner cleans all your watches, jewellery, fountain pens, dentures, razor heads, printer heads, small silverware and small machined parts. Mains powered and easy to use. Fill the tank with water, add a mild cleaning solution and set the timer. The LCD tells you how long to go and the timer has 5 settings from 90 seconds up to 7 minutes 30 seconds.



SPECIFICATIONS	YH-5408
Tank Volume	550ml
Power Consumption	50W
Time Settings	1 ½ minutes 6 minutes 3 minutes 7 ½ minutes 4 ½ minutes



	CAT.	Qty 1+	Qty 3+	Qty 6+
Domestic Ultrasonic Cleaner	YH-5408	\$79.95	\$74.95	\$63.95

### DIGITAL 2.5L 170W ULTRASONIC CLEANER

This unit features a generous 2.5 litre 304-grade stainless steel bowl, controllable heating element and digital controls. It comes with a lid (if you are using volatile solvents), features a stylish cabinet design and is supplied with a basket. Very well built.



SPECIFICATIONS	YH-5412
Tank Capacity	2500ml (Max 2100ml, Min 60ml)
Power Consumption	170W @ 240V 50Hz
Time Settings	1 min 30sec, 3 mins, 4 mins 30 sec, 6 min 30 sec, 8 mins
Ultrasonic Freq	35kHz
Ceramic Heater	100W approx with 65°Ctemp limit
Weight	2.5kg
Tank Dimensions	245(W) x 150(D) x 76(H)mm
Unit Dimensions	290(W) x 223(D) x 185(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	YH-5412	\$169.00	\$151.95	\$134.95

### PCB WASH DEFLUXING SOLUTION

Removes flux and residue from circuit boards to provide an extremely clean and contaminant free surface. The ready to use solution can be safely used in ultrasonic tanks for various applications including: jewellery, metal parts degreasing, removing flux and cleaning sensitive electronic parts. Appropriate for both static and ultrasonic cleaner use.

- Non-flammable
- Water-based (Biodegradable)



For other PCB products see page 46

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 Litre Bottle	NA-1070	\$14.95	\$13.45	\$11.95

## MAGNIFIERS

### MAGNIFYING GLASS

This huge 4.5" diameter viewer allows hands free operation. It will fold into a neat and easy to store package.



See our range of Digital Microscopes on page 97

	CAT.	Qty 1+	Qty 5+	Qty 10+
	QM-3505	\$8.95	\$7.95	\$6.95

## MAGNIFIERS (CONTINUED)

### EYE MAGNIFIER

This 3 times magnifier is handy for checking PC boards, looking at stamps or coins, jewellery, etc, etc.

- Every hobbyist should have one
- Dimensions: 28(H) x 22(dia view area) x 40(dia base)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	QM-3515	\$8.95	\$7.95	\$6.95

### MAGNIFYING LENS WITH LEDS

Ideal for the elderly or vision-impaired. Keep one in the glovebox for reading the street directory in the dark

- Big, clear 90mm lens illuminated by two LEDs
- Requires 2 x AAA batteries
- Dual magnification: 3X & 5X
- Case and cleaning cloth included
- Dimensions: 90(Dia.) x 160(L)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	QM-3537	\$9.95	\$8.95	\$7.95

### MICRO MAGNIFIER WITH LED

Having trouble reading or working on your hobby in fading or poor light? This convenient pocket-size magnifier with super bright LEDs allows you to work or read for longer periods. Comes complete with a soft pouch for easy storage. Ideal to take travelling or camping.

- 2 Super bright white LEDs
- 3 X magnification with super 5 X magnifier
- One touch ON/OFF operation
- Dimensions: 90(H) x 58(W) x 6(D)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	QM-3531	\$9.95	\$8.95	\$7.95

### HAND-HELD MAGNIFYING GLASS WITH COB LEDS

Powerful magnification with the added benefit of LEDs, all in a convenient hand-held case! It weighs just over 200g including batteries, so you can take it anywhere too. There are three LEDs so it will provide well-spread illumination of your subject matter. Includes LED on/off switch.

- 3 x COB LEDS
- Lightweight
- Handheld
- Batteries: 2 x AA (Not Included)
- Weight: 201g (Including Batteries)
- Dimensions: 114(W) x 240(H) x 20(D)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	QM-3535	\$12.95	\$11.45	\$9.95

### LED HANDHELD MAGNIFIER WITH THREE LENSES

This versatile illuminated hand magnifier set includes three interchangeable lenses at magnifications of 2.5X, 5X, and 16X to suit a multitude of applications. The 2.5x glass is great for reading small text and the built in LED's mean this is great for bedtime reading, don't wake your partner reading with the lights on anymore. The 5x is often used for electronics and/or arts and crafts, while the 16x magnifying glass is also good for electronics and re-working circuit boards, whilst it is also good for print checks. The light emitted by the LEDs is a bright cool white colour temperature, which effectively illuminates the subject being inspected.

- 2 Super bright white LEDs



SPECIFICATIONS	QM-3519
Lenses Included	2.5X, 5X, 16X
Power	2 x AAA batteries
Dimensions	200(L) x 110 (W) x 27 (H)

	CAT.	Qty 1+	Qty 5+	Qty 10+
	QM-3519	\$24.95	\$22.45	\$19.95

## 10X LED MAGNIFIER WITH SCALE

With all metal construction and glass optics, this superb little magnifier provides 10 dioptre magnification with razor-sharp clarity. Inside the viewer is a graduated scale in metric and imperial graduations so you can actually take measurements of an object down to fractions of a millimetre. Three LEDs and the 26mm eyepiece provide crystal-clear even illumination of the subject. Ideal for checking PCBs in preproduction, lab, science, education or engineering applications. 2x AA batteries included.

- 10x magnification
- All metal construction
- Satin chrome finish
- Ground glass optics
- Dimensions: 180(L)mm



CAT.	Qty 1+	Qty 5+	Qty 10+
QM-3539	\$29.95	\$26.95	\$23.95

## LABORATORY MAGNIFIERS & LAMPS

### 6/12 LED MAGNIFYING GLASS

Extremely robust, this is not the kind of magnifier you keep in the desk and bring out occasionally. All metal construction makes it ideal for the lab, workshop or photography studio. The high quality glass lens provides superior optics. 12 LEDs ensure ample illumination for your work and can be switched to a low power setting of 6 LEDs.

- Zip nylon carry case
- 85mm lens diameter
- 3.5x dioptre magnification
- Requires 2 x AA batteries
- Dimensions: 240(L) x 110(Dia.)mm



CAT.	Qty 1+	Qty 5+	Qty 10+
QM-3534	\$29.95	\$26.95	\$23.95

### LED HEADBAND MAGNIFIER

This magnifying headset leaves both hands free and can be worn over prescription or safety glasses. It also has a built-in LED light that can be rotated up, down or side to side to illuminate your work. There are three lenses that can be used in combinations to give 1.5x, 3x, 8.5x or 10x magnification. The head strap is fully adjustable and locks into position and the lens assembly can be swivelled up out of the way when not in use. A multitude of uses including lapidary, jewellery, model-making, electronics and camera repair.

- Requires 2 x AAA batteries

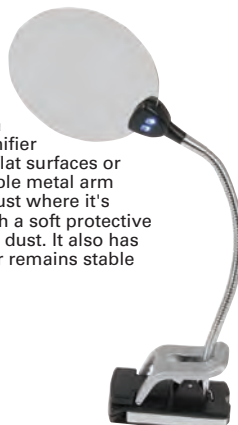


CAT.	Qty 1+	Qty 5+	Qty 10+
QM-3511	\$29.95	\$26.95	\$23.95

### ILLUMINATED GOOSENECK MAGNIFIER

The gooseneck magnifier is a valuable accessory for coin/stamp collectors, photography etc. The 2X main lens and 5X insert lens with the bonus of 2 LED lights, is a welcome addition for any hobbyist. The magnifier is clip-on or free standing. Suitable for most flat surfaces or workplace incline up to 38mm thick. The flexible metal arm ensures that you can position the magnifier just where it's needed. This handy magnifier also comes with a soft protective pouch for your lens to protect it from dirt and dust. It also has metal stabilisers to ensure that your magnifier remains stable while working.

- Stands 225mm high
- Includes protective lens pouch
- Lens Diameter: 88mm
- Requires 3 x AAA batteries



CAT.	Qty 1+	Qty 5+	Qty 10+
QM-3532	\$29.95	\$26.95	\$23.95

## 3X DESKTOP MAGNIFIER WITH LEDS

Perfect for compact workspaces. A large 100mm 3-dioptre glass lens provides powerful magnification. 30 LEDs are mounted around the ring for perfect illumination. The desktop stand includes two knuckles so you can adjust the lens to where you need it. Mains powered, adaptor included.

- Compact desktop mount
- Adjustable stand
- 100mm 3-dioptre lens



SPECIFICATIONS	QM-3552
Power	240V @ 32mA, 6W, 50/60Hz
LED Type	SMD 2835
LED Lifetime	20,000 Hours
Lumens	560
Light Colour	6000-6500K -CRI80
Lens	100mm Glass
Weight	1.2kg
Cable Length	1.3m
Dimensions	184(W) x 330(H) x 160(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
Desktop 30 LED Magnifying Lamp	QM-3552	\$59.95	\$53.95	\$47.95
4 inch 5 dioptre lens to suit	QM-3553	\$12.95	\$11.45	\$9.95

### 3X LABORATORY MAGNIFIER WITH LEDS

The ultimate workbench companion when working on tiny projects. Powerful 127mm diameter 3-dioptre magnification lens brings tiny items into clear view, while the fully adjustable arm puts it wherever you need it. 60 LEDs around the ring of the magnifier provide powerful illumination with high / low brightness settings. A plastic flip-down cover keeps the magnifier glass in top condition when not in use. Mains powered, adaptor supplied.

- High / low light settings
- Fully adjustable arm with clamp mount
- Large diameter magnifier



SPECIFICATIONS	QM-3554
Power	240V @ 62mA, 4W/8W, 50/60Hz
LED Type	SMD 2835
LED Lifetime	20,000 Hours
Lumens	380/760
Light Colour	6000-6500K -CRI80
Lens	127mm Glass
Weight	2.4kg
Height	Up to 900mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
Laboratory Magnifier Lamp	QM-3554	\$119.00	\$106.95	\$94.95
5 Inch 5 dioptre lens to suit	QM-3555	\$12.95	\$11.45	\$9.95
5 Inch 8 dioptre lens to suit	QM-3556	\$19.95	\$17.95	\$15.95

### ROLLING FLOOR BASE FOR MAGNIFYING LAMPS

Mount a magnifying lamp to this base and you can roll it around the floor providing even greater flexibility in observation work. Great for lab work. Heavy base so it doesn't easily topple over.

- Suitable for use with magnifiers QM-3554, QM-3546 and QM-3548
- Dimensions: 700(H) x 385(Dia)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	QM-3549	\$99.95	\$89.95	\$79.95

NONE OF THE ABOVE PRODUCTS MAGNIFY OUR PRICES!!



## TOOL CASES & BOXES

### FOAM INSERT ALUMINIUM ATTACHÉ CASES

Ideal for Camera, Video and Test Equipment, these cases feature removable 15mm square foam pieces so you can make a hole to the exact size of your valuable equipment. The lid also has a foam insert for complete protection.

Cases are lockable and supplied with two keys.  
Great for wine and glasses also.



HB-6355



HB-6356

W X D X H(MM)	CAT.	Qty 1+	Qty 4+	Qty 10+
Small 407 x 277 x 95	HB-6355	\$44.95	\$40.45	\$35.95
Large 450 x 320 x 145	HB-6356	\$79.95	\$71.95	\$63.95

### Related Product:

#### CONDUCTIVE FOAM

Non-static reusable sheeting for storing CMOS, IC's, LSI's, etc.

- Will store up to 150 ICs on one sheet
- Size 225 x 150mm
- Ideal for lining storage trays to provide antistatic protection
- Can be cut with scissors or hobby knife for smaller pieces



CAT.	Qty 1+	Qty 3+	Qty 6+
ZV-9998	\$9.95	\$8.75	\$6.75

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!



## STORAGE CASES

Ideal for carrying small components and is an indispensable addition to any tool kit. See through plastic construction enables the contents to be easily identified and the 2 snap action latches secure the lid and keep everything in its rightful place.

### 6 COMPARTMENT MINI STORAGE CASE

2 of the compartments have guides to enable them to be divided in half and 2 dividers are included.

- Compartments: 27(W) x 77(L) x 23(D)mm
- Overall dimensions: 125(W) x 85(L) x 27(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
HB-6308	\$2.75	\$2.45	\$2.15

### 18 COMPARTMENT STORAGE BOX

Consists of three rows with removable dividers so you can configure it for longer parts.

- Compartment size: 37(L) x 37(W) x 30(D)mm
- Dimensions: 230(L) x 115(W) x 35(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
HB-6306	\$4.45	\$3.95	\$3.45

### 18 COMPARTMENT STORAGE CASE

6 compartments measuring 43(W) x 37(D) x 167(L)mm. These can be divided into 2, 3 or 4 sub-compartments using the dividers provided.

- Overall dimensions: 274(W) x 40(D) x 175(L)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
HB-6312	\$9.95	\$8.75	\$7.75

### 28 COMPARTMENT STORAGE CASE

Can be configured to have anything from 4 big compartments measuring 350(W) x 52(L) x 45(D) mm to 28 compartments measuring 48(W) x 52(L) x 45(D) mm, or anything in between using the dividers provided.

- Overall dimensions: 357(W) x 48(H) x 220(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
HB-6313	\$14.95	\$13.45	\$11.95

### INDUSTRIAL STORAGE CASES

Built for the rough and tumble of the building site, factory or workshop. Made from sturdy ABS with solid clasps and removable compartment trays so you can take parts with you to the job. Two sizes available:

#### 15 COMPARTMENT STORAGE

12 compartments: 55(L) x 40(W) x 50(D)mm  
3 compartments: 80(L) x 50(W) x 50(D)mm  
Case size: 335(L) x 205(W) x 60(D)mm

#### 19 COMPARTMENT STORAGE

4 compartments: 55(L) x 40(W) x 50(D)mm  
8 compartments: 80(L) x 50(W) x 50(D)mm  
7 compartments: 110(L) x 80(W) x 50(D)mm  
Case size: 335(L) x 420(W) x 60(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
15 Compartments	HB-6304	\$9.95	\$8.95	\$7.95
19 Compartments	HB-6305	\$18.95	\$16.95	\$14.95

## Smart Hardware Competition:

- JESSE HUNTER, SHOPS AT JAYCAR COBURG

"I made a totem pole that lights up brightly at night so my friends can find each other at music festivals. It's programmed with different patterns, a BPM button to sync it to the music and an LCD to display the current settings."





## ▼ PARTS CABINETS

### 6 BIN PARTS RACK CABINETS SMALL

Similar to our large parts rack, this unit is designed to house smaller items such as ICs, nuts, screws etc.

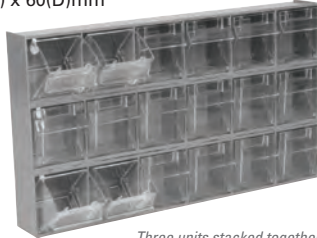
- Trays measure 60(W) x 65(H) x 45(D)mm each and also tilt down to 45 degrees
- Can be wall mounted & multiple units can be used for larger storage requirements
- Overall dimensions: 400(W) x 75(H) x 60(D)mm



### LARGE

This handy parts rack holds a variety of components in neat, see through trays that tilt down to an angle of 45 degrees for easy access.

- Each has an integral label holder and measures 85(W) x 95(H) x 65(D)mm
- The rack can be wall mounted and multiple units can be nested together for larger storage requirements
- Dimensions: 600(W) x 110(H) x 90(D)mm



Three units stacked together.

	CAT.	Qty 1+	Qty 4+	Qty 10+
Small Rack Cabinets	HB-6317	\$9.95	\$8.75	\$7.75
Large Rack Cabinets	HB-6318	\$24.95	\$22.35	\$19.70

### 30 DRAWER PARTS CABINET

6 rows of 5 drawers, measuring 50(W) x 115(D) x 30(H)mm. Ideal for workshop use & can be wall mounted.

- Stack multiple units together for larger storage
- Overall size: 280(W) x 130(D) x 210(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
30 Drawers	HB-6323	\$29.95	\$26.95	\$23.95

### 33 DRAWER PARTS CABINET

A very useful cabinet with 8 rows of 4 pull out drawers (32 drawers) plus one full width pull out drawer at the bottom for larger items (total 33 drawers). Each small drawer is 125mm deep and 65mm wide. The unit can be free standing, or wall mounted if required. Ideal for storage requirements and workshop.

- Overall dimensions: 414(H) x 304(W) x 135(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
33 Drawers	HB-6330	\$29.95	\$26.95	\$23.95

### 4 TRAY TOOL/STORAGE CASE

On-site storage of parts, tools, fishing tackle or anything else you need to tote around. Each compartment has a 233 x 122 x 32mm 13 compartment storage box for small items with dividers that can be removed to accommodate larger things. All the hinges and catches are the durable pintle type, not a flimsy bit of folded plastic that will snap after a week. The top tray has a generous 265 x 160 x 65 space for ancillary items and it's finished in a tasteful shade of industrial yellow and black.

- Dimensions: 270(W) x 260(H) x 150(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HB-6302	\$24.95	\$22.45	\$19.95

## ▼ MAN CAVE STORAGE

### 44 PIECE WALL MOUNTED STORAGE

Keep your workbench neat and tidy, while having everything at your fingertips. This fantastic 44-piece organiser mounts to the wall, while providing various methods for storage. There's 28 storage bins in various sizes, 4 assorted tool holders, and 10 pegs for hanging items too. It can be laid out in all sorts of different configurations to suit your particular needs. It takes just minutes to assemble, and you're ready to go. Minor assembly required.

- Various tool holders
- Assorted bin sizes
- Flexible mounting configuration



SPECIFICATIONS	HB-6340
Overall Weight	4.9kg
Dimensions	Small Grey Bins: 101(w) x 115(d) x 70(H)mm Blue Bins: 100(W) x 163(D) x 72(H)mm Large Grey Bins: 105(W) x 210(D) x 70(H)mm Wall Mounted Rack: 479(W) x 538(H) x 15(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
44 Piece	HB-6340	\$39.95	\$35.95	\$31.95

### 16 BIN TABLETOP STORAGE ORGANISER

A simple way to keep your desktop free from component clutter and mess. The benchtop stand provides support for 12 small storage bins, and 4 large storage bins to hold your components, spare parts, small tools, or whatever you like! There is also a fantastic magnetic strip along the top of the frame, perfect for storing all your steel hand tools such as screwdrivers and spanners, or even just loose screws, bolts, nuts and other easily lost metal parts! Some basic assembly is required.

- Magnetic strip for tools
- Plenty of storage
- No fuss setup



SPECIFICATIONS	HB-6341
Bin Capacity	Red: 2.2kg, Blue: 3.6kg
Weight	2.7kg
Dimensions	Red Bins: 103(W) x 165(D) x 76(H)mm Blue Bins: 152(W) x 235(D) x 127(H)mm Organiser: 635(W) x 254(D) x 658(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
16 Bins	HB-6341	\$49.95	\$44.95	\$39.95

### Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck\*.

\*Conditions apply – see page 526 For details

## Digital Multimeters:

The 2018 Multimeter line up has, like most years, not changed much. We have managed to renegotiate prices on some models from our factory so these prices have come DOWN, as opposed to your electricity bill!! All new models are also cheaper than previous ones.

So if you have had your eye on the following meters QM-1551 True RMS Autoranger, QM-1549 IP67 Autoranger, QM-1321 Economy Autoranger, QM-1323 Cat III temp meter and QM-1493 Insulation Tester/Multimeter, they have just become more affordable!

The main change this year is our range of clamp meters. They are more accurate, easier to use and all cheaper. You will see them from p 250.

We also have a new Bluetooth® connect true RMS Digital Multimeter on p 247. It's a killer! We have a new Automotive DMM, the QM-1446 on page 245. It replaces an inferior unit that sold for \$20 more.

In addition to this we have a new true RMS Inductance/Capacitance DMM – the QM-1552 shown on p 245 which is also cheaper – and better than the model it replaces. All in all, we are very proud of our 2018 line up. We here at Jaycar work very, very hard at bringing in the best bench and field test instruments from around the world for you. Don't forget, most of our meters are so good, we have no hesitation in providing you with a LIFETIME GUARANTEE on these products. Why pay 2-3 times as much for expensive US or Euro made equipment when you don't have to?

Jaycar sells more Digital Multimeters than anyone else in Australia or New Zealand and there is a reason for that.

We are trusted, deliver the best quality for the price and are here at your service almost every day of the year.

### Select Your Model: Digital Multimeters



	QM-1500	QM-1517	QM-1527	QM-1529	QM-1321	QM-1323	QM-1552	QM-1446	QM-1551	QM-1570	QM-1549	QM-1571	QM-1594	QM-1578	XC-5078	QM-1493
Display (Count)	2000	2000	2000	2000	4000	4000	2000	2000	4000	4000	4000	4000	4000	6000	2000	4000
Security Category	Cat II 500V	Cat III 500V	Cat III 500V	Cat III 600V	Cat III 1000V	Cat III 600V	Cat IV 600V	Cat III 600V	Cat III 600V	Cat III 600V	Cat IV 600V	Cat IV 600V	Cat III 600V	Cat III 1000V	Cat III 600V	Cat III 1000V
Backlight		•	•	•	•	•	•	•	•	•	•	•	•	•		•
Bargraph														•		•
Auto-range				•	•	•		•	•	•	•	•	•	•	•	
True RMS					•		•		•	•	•	•		•		
VDC	1000V	500V	500V	600V	1000V	600V	1000V	1000V	600V	600V	1000V	1000V	250V	1000V	600V	1000V
VAC	750V	500V	500V	600V	750V	600V	750V	700V	600V	600V	1000V	1000V	250V	1000V	600V	750V
ADC	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	200mA	
AAC	-	-	-	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	200mA	
Resistance	2M	2M	2M	20M	40M	40M	200M	20M	40M	40M	40M	40M	20M	60M	20M	400R
Capacitance					100mF	100μF	100mF		100μF	4000μF	100μF	100μF	100μF	6000μF		
Frequency					10MHz	10MHz	10MHz		10MHz	40kHz	10MHz	10MHz	10MHz	10kHz		
Inductance							20H									
Temperature						760°C	1000°C	1000°C	760°C	760°C		760°C	750°C	760°C		
Tachometer								•								
Duty Cycle					•	•			•	•	•	•		•		
Dwell								•								
Continuity			•	•	•	•	•	•	•	•	•	•	•	•	•	
Diode Test	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Transistor Test	•															
Data Logger												•		•		
Relative Measurement						•	•		•		•	•	•	•		
Data Hold		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Min / Max Hold					•		•	Max Hold		•		•		•	Max Hold	
Non Contact Voltage			•	•	•	•	•		•			•	•			
IP Rated										IP65	IP67	IP67		IP67		
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## DIGITAL MULTIMETERS

### LOW COST DMM

- 19 Range
- 2000 Count
- Transistor Test
- Diode Test
- 10A DC Current
- Ideal First Teter
- Compact Size

#### PERFECT FIRST METER

This is a full featured meter with plug-in 4mm probes AND transistor tester. This is the ideal first multimeter, and will give years of faithful service, in fact, you will only need to replace this meter if you require a unit with very high input impedance.



### ECONOMY CAT III DMM WITH DATA HOLD

- Cat III 600V
- 2000 Count
- Data Hold
- Square Wave Output
- Backlit Display
- Continuity Buzzer

A simple and practical multimeter with a luminous backlit display, data hold function, shock-proof durable design. A fully featured multimeter perfect for a student or the enthusiast on a budget. The durable enclosure helps prevent damage from knocks and falls.



### DATA HOLD DMM WITH NON CONTACT AC VOLTAGE DETECTION

- 19 Range
- 2000 Count
- Non-contact Voltage Detection
- Diode Test
- 10A DC Current
- Data Hold
- Backlight
- Auto Power-off
- Continuity Buzzer

THIS METER INCLUDES QUALITY TEST LEADS

A handy digital multimeter with lots of features at a great price has all the features you would expect including holster and probes. Excellent for those that are ready to take the next step in the world of electronics. It also features a built-in non-contact voltage detector that sounds an internal buzzer and flashes an LED when the DMM is in close proximity to mains power.



SPECIFICATIONS	QM-1500	QM-1517	QM-1527
Display	2000 count	2000 count	2000 count
Measurement Cat.	Cat II 500V	Cat II 600V	Cat II 500V
Basic Vdc Accuracy	0.500%	2.000%	0.800%
DC Voltage	200mV, 2V, 20V, 200V, 1000V ( $\pm 0.5\%$ )	200mV, 2000mV, 20V, 200V, 500V ( $\pm 1.0\% + 10$ )	200V, 500V ( $\pm 0.8\%$ )
AC Voltage	200V, 750V (Max input 750V RMS) ( $\pm 1.2\%$ )	200V, 500V ( $\pm 2.0\% + 5$ )	200 $\mu$ V, 2mV, 20mV, 200V, 500V ( $\pm 1.2\%$ )
DC Current	200 $\mu$ A, 2mA, 20mA, 200mA, 10A ( $\pm 1.2\%$ )	200 $\mu$ A, 2000 $\mu$ A, 20mA, 200mA, 10A ( $\pm 2.0\% + 5$ )	200 $\mu$ A, 2mA, 20mA, 200mA, 10A ( $\pm 1\%$ )
AC Current	-	-	-
Resistance	200 $\Omega$ m 2k $\Omega$ , 20k $\Omega$ , 200k $\Omega$ , 2M $\Omega$ ( $\pm 1.2\%$ )	200 $\Omega$ , 2k $\Omega$ , 20k $\Omega$ , 200k $\Omega$ , 2M $\Omega$ ( $\pm 2.0\% + 5$ )	200 $\Omega$ , 2k $\Omega$ , 20k $\Omega$ , 200k $\Omega$ , 2M $\Omega$ ( $\pm 1\%$ )
Capacitance	-	-	-
Frequency	-	-	-
Inductance	-	-	-
Temperature	-	-	-
Ac Rectification	Average	Average	Average
Input Impedance	1M	1M	1M
Special Features	Transistor test	Data hold, backlight, square wave output, buzzer	Transistor test, Data hold, backlight, non-contact voltage
Battery / Fuse	9V / 500mA/250V (all included)	9V / F200mA/250V (all included)	9V / 200mA/600V (all included)
Dimensions	125(H) x 68(W) x 23(D)mm	115(H) x 65(W) x 30(D)mm	145(H) x 65(W) x 35(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1500	\$9.95	\$8.75	\$7.75

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1517	\$14.95	\$13.45	\$11.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1527	\$19.95	\$17.95	\$15.95



## DIGITAL MULTIMETERS (CONTINUED)

### AUTORANGING DMM WITH NON-CONTACT VOLTAGE DETECTION

- Cat III 600V
- 2000 count
- Auto ranging
- Non-contact voltage detection
- Backlight
- Data hold
- Low battery warning
- Auto power-off



This Cat III DMM is suitable for voltages up to 600VAC and has 15mm high digits for easy reference. Featuring overload protection and indication, diode check, continuity check, and you won't have to worry about batteries going flat with the auto power off feature. It also features a built-in non-contact voltage detector that sounds an internal buzzer and flashes an LED when the DMM is in close proximity to mains power.

THIS METER INCLUDES QUALITY TEST LEADS

### AUTORANGING TRUE RMS DMM WITH NON-CONTACT AC DETECTION

- Cat III 1000V
- 4000 count
- Overload protection
- Capacitance
- Frequency
- Min/max hold
- Backlight
- Auto power off



Our entry level True RMS Multimeter featuring autoranging, 1000V CAT III rating, Non contact voltage detection. With a sturdy construction and backlit display and quality test leads this is the perfect multimeter for an apprentice or novice hobbyist.

THIS METER INCLUDES QUALITY TEST LEADS

### CAT III DMM WITH TEMPERATURE

- Non-contact voltage
- Duty cycle
- Backlight
- Rugged moulded case



A budget-priced meter with everything you need - capacitance, temperature and 10A on AC and DC, compact and light weight with rugged moulded case.



Case & K-probe included.

THIS METER INCLUDES QUALITY TEST LEADS



SPECIFICATIONS	QM-1529	QM-1321	QM-1323
Display	2000 count	4000 count	4000 count
Measurement Cat.	Cat III 600V	Cat III 1000V	Cat III 600V
Basic VDC Accuracy	0.800%	1.500%	0.500%
DC Voltage	200mV, 2V, 20V, 200V, 600V (± 0.8%)	40mV, 400mV, 4000mV, 40V, 400V, 1000V	400mV, 4V, 40V, 400V, 600V (± 0.5%)
AC Voltage	200uV, 2mV, 20mV, 200V, 600V (± 1%)	40mV, 400mV, 4000mV, 40V, 400V, 750V	400mV, 4V, 40V, 400V, 600V (± 1.2%)
DC Current	200uA, 2mA, 20mA, 200mA, 10A (± 3%)	400uA, 4000uA, 40mA, 400mA, 4A, 10A	4mA, 40mA, 400mA, 10A (± 2.5%)
AC Current	200uA, 2mA, 20mA, 200mA, 10A (± 3%)	400uA, 40mA, 400mA, 4A, 10A	4mA, 40mA, 400mA, 10A (± 3%)
Resistance	200Ω 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ (± 1.5%)	400Ω, 4kΩ, 40kΩ, 400kΩ, 4MΩ, 40MΩ	400Ω, 4kΩ, 40kΩ, 400kΩ, 4MΩ, 40MΩ (± 1.2%)
Capacitance	-	10nF, 100nF, 1uF, 10uF, 100uF, 1mF, 10mF, 100mF	4nF, 40nF, 4uF, 40uF, 100uF, (±3%)
Frequency	-	10Hz, 100Hz, 1kHz, 10kHz, 100kHz, 1MHz, 10MHz	4kHz, 40kHz, 400kHz, 4000kHz, 10MHz
Inductance	-	-	-
Temperature	-	-	-20°C to +760° (±3%)
AC Rectification	Average	True RMS	Average
Input Impedance	10M	10M	10M
Special Features	Data hold, backlight, non-contact voltage	Backlight, min/max hold	Non-contact voltage, duty cycle, backlight
Battery / Fuse	2 x AAA / 200mA/600V (all included)	9V / 0.5A/1000V 10A/1000V (all included)	9V / F10A/250V, F500mA/250V (all included)
Dimensions	140(H) x 70(W) x 31(D)mm	200(H) x 92(W) x 60(D)mm	138(H) x 68(W) x 37 (D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1529	\$24.95	\$22.45	\$19.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1321	\$34.95	\$30.95	\$27.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1323	\$44.95	\$39.95	\$35.95

## CATIV TRUE RMS INDUCTANCE/CAPACITANCE DMM

- Cat IV 600V rated!
- Backlit LCD
- Frequency
- Relative measurement
- Min / max
- Data hold
- Leads & K-type thermocouple included.
- Inductance
- Capacitance

Powerful frequency measurement with high accuracy, as well as capacitance up to 100mF!

It's a serious choice for serious tasks. Moulded case and the added facility of non-contact voltage detection.



THIS METER  
INCLUDES  
QUALITY  
TEST LEADS



## AUTOMOTIVE DMM WITH DWEIL AND TACHO

- Dwell angle
- RPM x10
- Data hold
- Max hold
- Continuity & diode test
- Backlight
- Auto power off

Perfect for the workshop as an engine analyser as well as basic DMM. Full dwell angle measurement and tachometer, with max / data hold and bright backlit LCD.



THIS METER  
INCLUDES  
QUALITY  
TEST LEADS



## CAT III TRUE RMS AUTORANGING 4000 COUNT DMM WITH TEMPERATURE & NON- CONTACT AC VOLTAGE DETECTION

- Backlit LCD
- Leads & K-type Thermocouple Included
- Automatic (-) Negative Polarity Indication
- Data Hold
- 30 Min Auto Power Off
- Carry/Storage Case For DMM & Leads

A powerful true RMS multimeter that includes non-contact voltage testing, backlit LCD, and a carrying pouch. The rear of the unit has a foldout stand so you can sit the meter at a comfortable viewing angle on your desk, workbench or car. Powered by 1 x 9V battery (included)



THIS METER  
INCLUDES  
QUALITY  
TEST LEADS



SPECIFICATIONS	QM-1552	QM-1446	QM-1551
Display	2000 count	2000 count	4000 count
Measurement Cat.	Cat III 1000V / Cat IV 600V	Cat II 1000V / Cat III 600V	Cat III 600V
Basic VDC Accuracy	0.5%		1.500%
DC Voltage	200mV, 2V, 20V, 200V, 1000V (±0.5%)	200mV, 2V, 20V, 200V, 1000V (±0.8%)	400mV, 4V, 40V, 400V, 600V (±1.5%)
AC Voltage	200mV, 2V, 20V, 200V, 750V (±0.8%)	2V, 20V, 200V, 700V (±1.0%)	400mV, 4V, 40V, 400V, 600V (±2.0%)
DC Current	200µA, 200mA, 10A (±1.0%)	20mA, 200mA, 2A, 10A (±1.5%)	400µA, 4000µA, 40mA, 400mA, 10A (±1.5%)
AC Current	200µA, 200mA, 10A (±1.2%)	20mA, 200mA, 2A, 10A (±1.8%)	400µA, 4000µA, 40mA, 400mA, 10A (±1.8%)
Resistance	200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ, 200MΩ (±0.8%)	200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ (±1.0%)	400Ω, 4kΩ, 40kΩ, 400kΩ, 4MΩ, 40MΩ (±1.2%)
Capacitance	10nF - 100mF	40nF, 400nF, 4µF, 40µF, 100µF (±3%)	40nF, 400nF, 4µF, 40µF, 100µF (±3%)
Frequency	10Hz, 100Hz, 1kHz, 10kHz, 100kHz, 1MHz, 10MHz (±0.1%)	5Hz, 50Hz, 500Hz, 5kHz, 50kHz, 500kHz, 5MHz, 10MHz (±1.2%)	5Hz, 50Hz, 500Hz, 5kHz, 50kHz, 500kHz, 5MHz, 10MHz (±1.2%)
Inductance	2mH-20H	-	-
Temperature	-20 to 1000°C / 0 to 1832°F (±2-3%)	-20 to 1000°C / -4 to 1832°F (±5%)	-20°C-760°C / -4°F-1400°F (±3%)
AC Rectification	True RMS	Average	True RMS
Input Impedance	10M	10M	10M
Special Features	Non-contact voltage, back light, data hold, diode test, auto power off	Dwell angle, diode test, continuity test, engine revolutions, data hold, backlight	Continuity, diode check, blue back lit LCD, non-contact voltage, foldout stand
Battery / Fuse	9V	2 x 1.5V AA /	9V / 500mA/250V, F10A/250V (all included)
Dimensions	200(L) x 92(W) x 60(D)mm	180(L) x 87(W) x 50(D)mm	138(L) x 68(W) x 37(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1552	\$59.95	\$53.95	\$47.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1446	\$59.95	\$53.95	\$47.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1551	\$64.95	\$57.95	\$51.95

## ✓ DIGITAL MULTIMETERS (CONTINUED)

### MINI TRUE RMS DIGITAL MULTIMETER, AUTORANGING

- IP65 Weatherproof
- True RMS
- Auto Power-Off
- Backlight
- Data Hold & Relative Function
- Duty Cycle %
- Audible Continuity
- 10A Current Range

This compact true RMS digital multimeter has a double moulded plastic housing and high contrast 4000 count LCD display. Duty Cycle: 9.99%. It is IP65 rated and has been drop tested to a height of 2 metres. Includes test leads, 9V battery and carry case.



**THIS METER INCLUDES QUALITY TEST LEADS**

Type K temperature probe & carry case included.



### IP67 TRUE RMS AUTORANGING CAT IV DMM

- IP67 Waterproof
- True RMS
- Auto Power-Off
- Backlight
- Data Hold & Relative Function
- Diode Test
- Autoranging
- Audible Continuity
- 10A Current Range

This is an excellent true RMS multimeter that features a large, easily read display and carries an IP67 environmental rating. This means the multimeter is waterproof and will not be damaged if accidentally dropped into water or left out in the rain. The meter has data hold and relative measurement capabilities and is housed in a robust, double moulded case. Includes leads, soft carry case and user manual. Double moulded case.



SPECIFICATIONS	QM-1570	QM-1549
Display	4000 count	4000 count
Measurement Cat.	Cat III 600V	Cat IV 600V
Basic VDC Accuracy	0.5%	0.5%
DC Voltage	400mV, 4V, 40V, 400V, 600V ( $\pm 1.0\%$ )	400mV, 4V, 40V, 400V, 1000V ( $\pm 0.5\%$ )
AC Voltage	4V, 40V, 400V, 600V ( $\pm 1.2\%$ )	400mV, 4V, 40V, 400V, 1000V ( $\pm 0.8\%$ )
DC Current	400 $\mu$ A, 4000 $\mu$ A, 40mA, 400mA, 4A, 10A ( $\pm 1.2\%$ )	4mA, 40mA, 400mA, 10A ( $\pm 1.2\%$ )
AC Current	400 $\mu$ A, 4000 $\mu$ A, 40mA, 400mA, 4A, 10A ( $\pm 1.8\%$ )	4mA, 40mA, 400mA, 10A ( $\pm 1.8\%$ )
Resistance	400 $\Omega$ , 4k $\Omega$ , 40k $\Omega$ , 400k $\Omega$ , 4M $\Omega$ , 40M $\Omega$ ( $\pm 1.5\%$ )	400 $\Omega$ , 4k $\Omega$ , 40k $\Omega$ , 400k $\Omega$ , 40M $\Omega$ ( $\pm 0.8\%$ )
Capacitance	40nF, 400nF, 4 $\mu$ F, 40 $\mu$ F, 400 $\mu$ F, 4000 $\mu$ F ( $\pm 4.5\%$ )	4nF, 40nF, 4 $\mu$ F, 40 $\mu$ F, 100 $\mu$ F ( $\pm 3\%$ )
Frequency	Up to 10kHz (1.2%)	4kHz, 40kHz, 400kHz, 4MHz 10MHz ( $\pm 1.5\%$ )
Inductance	-	-
Temperature	-20°C-760°C ( $\pm 1.2\%$ )	-
AC Rectification	True RMS	True RMS
Input Impedance	10M	10M
Special Features	Non-contact ACV detection, Data hold, Min/Max Recording, Heavy Duty & Compact	IP67, data-hold, relative measurement, backlight
Battery / Fuse	2 x AAA / F10A/600V, F500mA / 600V (all included)	9V / F10A/1000V, F500mA/100V (all included)
Dimensions	135(L) x 70(W) x 45(D)mm	182(H) x 82(W) x 55(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1570	\$69.95	\$62.95	\$55.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1549	\$89.95	\$80.95	\$71.95



## IP67 TRUE RMS AUTORANGING CAT IV DMM WITH WIRELESS USB INTERFACE

- IP67 Waterproof
- True RMS
- Wireless USB Interface
- PC Logging Software
- Auto Power-Off
- Backlight
- Non-Contact Voltage
- Data Hold
- Diode Test
- Autoranging
- Audible Continuity
- 10A Current Range
- Double Moulded Case

A quality true RMS multimeter with a wireless USB computer interface, non-contact voltage indicator, relative zero and data hold. Double moulded housing is impact resistant and quite durable, and IP67 waterproof rating makes this DMM capable of even the harshest conditions. Wireless USB interface and included logging software allow for computer based live data logging whilst keeping your computer completely isolated and protected.



THIS METER  
INCLUDES  
QUALITY  
TEST LEADS

## BLUETOOTH TRUE RMS DIGITAL MULTIMETER

- Bluetooth wireless
- True RMS
- 6000 count
- Cat IV 600V
- IP67 waterproof case
- Large backlit display
- Duty cycle measurement
- Relative measurement
- Min / max / avg functions
- Frequency measurement
- Capacitance
- Full autoranging



THIS METER  
INCLUDES  
QUALITY  
TEST LEADS

A stunning example of multimeter performance, with a rugged waterproof case to boot! Full auto ranging with high accuracy 6000 count display, as well as advanced math functions. All the usual features like data hold, temperature, capacitance, and a few not-so-common features like duty cycle measurement. Bluetooth connectivity provides a host of advanced monitoring and data logging functionality without fuss.



SPECIFICATIONS	QM-1571	QM-1578
Display	4000 count	6000 count
Measurement Cat.	Cat IV 600V	Cat IV 600V / Cat III 1000V
Basic VDC Accuracy	0.500%	0.500%
DC Voltage	400mV, 4V, 40V, 400V, 1000V ( $\pm 0.5\%$ )	600mV, 6V, 60V, 600V, 1000V ( $\pm 0.9\%$ )
AC Voltage	400mV, 4V, 40V, 400V, 1000V ( $\pm 0.8\%$ )	6V, 60V, 600V, 1000V ( $\pm 1.0\%$ )
DC Current	4mA, 40mA, 400mA, 10A ( $\pm 1.2\%$ )	60 $\mu$ A, 600 $\mu$ A, 60mA, 600mA, 10A ( $\pm 1.0\%$ )
AC Current	4mA, 40mA, 400mA, 10A ( $\pm 1.8\%$ )	600 $\mu$ A, 6000 $\mu$ A, 60mA, 600mA, 10A ( $\pm 1.0\%$ )
Resistance	400 $\Omega$ , 4k $\Omega$ , 40k $\Omega$ , 400k $\Omega$ , 40M $\Omega$ ( $\pm 0.8\%$ )	600 $\Omega$ , 6k $\Omega$ , 60k $\Omega$ , 600k $\Omega$ , 60M $\Omega$ ( $\pm 1.5\%$ )
Capacitance	4nF, 40nF, 4 $\mu$ F, 40 $\mu$ F, 100 $\mu$ F ( $\pm 3\%$ )	60nF, 600nF, 6 $\mu$ F, 60 $\mu$ F, 600 $\mu$ F, 6000 $\mu$ F ( $\pm 5.0\%$ )
Frequency	4kHz, 40kHz, 400kHz, 4MHz 10MHz ( $\pm 1.5\%$ )	0.001Hz, 1kHz, 10kHz ( $\pm 1.0\%$ )
Inductance	-	-
Temperature	-20°C to +760°C ( $\pm 3.0\%$ )	-20°C to 760°C / -4°F to 1400°F ( $\pm 1.0\%$ )
AC Rectification	True RMS	True RMS
Input Impedance	10M	10M
Special Features	Wireless USB, IP67, True RMS, non-contact voltage	True RMS, duty cycle, IP67 case, bluetooth connectivity
Battery / Fuse	9V / F10A/1000V, F500mA/100V (all included)	F10A 1000V,
Dimensions	170(H) x 79(W) x 50(D)mm	170(H) x 75(W) x 48(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1571	\$129.00	\$115.95	\$102.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1578	\$189.00	\$169.95	\$150.95

## ANALOGUE MULTIMETER

### ANALOGUE MULTIMETER

- Holster Included
- Audible Continuity
- 20K $\Omega$ /Volt

Digital multimeters have almost completely taken over, but there are those who prefer to use the old analogue meter - it's still the best way to test a capacitor. This well-made meter has audible continuity and a transistor leakage test, in addition to the normal set of functions. Have a closer look at this meter. It's a beauty.



THIS METER INCLUDES QUALITY TEST LEADS

THIS IS THE NICEST ANALOGUE METER WE HAVE EVER SEEN



## SPECIALITY METERS

### MULTIFUNCTION ENVIRONMENT METER WITH DMM

- Sound Level Meter
- Light Level Meter
- Indoor Temperature & Humidity Measurement
- Non Contact Voltage

A multi-function environment meter that combines the functions of a sound level meter, light meter, humidity meter and temperature meter. Typical sound applications include checking acoustics of recording studios, auditoriums and professional hi-fi installations. The light and humidity meters are ideal for video photographers, greenhouse and hydroponic setups, etc. Others who should find this meter essential include interior designers, factory and office managers, record and archive keepers, schools, hospitals, laboratories and, of course, universities.

THIS METER INCLUDES QUALITY TEST LEADS



### DMM WITH NETWORK CABLE TESTER

- Autoranging
- LAN Cable Tester
- Diode Test
- Multimeter Functions
- Audible Continuity
- Case Included
- LAN Tester Checks Faults & Missed Wired Conductors
- Manual Or Automatic Testing



This innovative device is ideal for network installers or technicians & will allow the user to easily check cable integrity or measure AC & DC voltage, current, resistance, & continuity etc. without needing to carry two separate devices. The unit will check for cable continuity, open circuits, short-circuits, & cross-connections etc. A remote terminator is included and enables the user to check network cables at a wall jack or patch panel. Supplied with loop back cable, LAN terminator, & multimeter leads.

THIS METER INCLUDES QUALITY TEST LEADS



SPECIFICATIONS	QM-1020	QM-1594	XC-5078
Display	Analogue	4000 count	2000 count
Measurement Cat.	-	Cat IV 600V	Cat III 600V
Basic Vdc Accuracy	3.000%	0.500%	0.500%
DC Voltage	100mV, 500mV, 2.5V, 10V, 50V, 250V, 1000V ( $\pm 3.0\%$ )	400mV, 4V, 40V, 100V, 250V ( $\pm 1\%$ )	200mV, 2V, 20V, 200V, 600V ( $\pm 0.5\%$ )
AC Voltage	10V, 50V, 250V, 1000V ( $\pm 4.0\%$ )	400mV, 4V, 40V, 100V, 250V ( $\pm 1.2\%$ )	200mV, 2V, 20V, 200V, 600V ( $\pm 1.2\%$ )
DC Current	50 $\mu$ A, 2.5mA, 25mA, 250mA ( $\pm 3.0\%$ )	400 $\mu$ A, 4mA, 40mA, 400mA, 10A ( $\pm 1\%$ )	2mA, 20mA, 200mA ( $\pm 1.5\%$ )
AC Current	-	400 $\mu$ A, 4mA, 40mA, 400mA, 10A ( $\pm 1\%$ )	2mA, 20mA, 200mA ( $\pm 2.0\%$ )
Resistance	2k $\Omega$ , 20k $\Omega$ , 200k $\Omega$ , 2M $\Omega$ , 20M $\Omega$ ( $\pm 3.0\%$ )	400 $\Omega$ , 4k $\Omega$ , 40k $\Omega$ , 400k $\Omega$ , 4M $\Omega$ , 40M $\Omega$ ( $\pm 0.8\%$ )	200 $\Omega$ , 2k $\Omega$ , 20k $\Omega$ , 200k $\Omega$ , 20M $\Omega$ ( $\pm 0.8\%$ )
Capacitance	-	50nF, 500nF, 5 $\mu$ F, 50 $\mu$ F, 100 $\mu$ F ( $\pm 3.5\%$ )	-
Frequency	-	5Hz, 50Hz, 500Hz, 5kHz, 500kHz, 10MHz ( $\pm 1.5\%$ )	-
Inductance	-	-	-
Temperature	-	-20°C to 750°C ( $\pm 1.2\%$ )	-
AC Rectification	Average	Average	Average
Input Impedance	10M	10M	10M
Special Features	dB, continuity buzzer.	LUX, SPL, Humidity	Data hold, max hold
Battery / Fuse	-	9V / F10A/600V, F500mA/600V (all included)	9V / 2 x AAA / F200mA/250V (all included)
Dimensions	150(L) x 100(W) x 35(D)mm	170(H) x 78(W) x 48(D)mm	162(L) x 74.5(W) x 44(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1020	\$29.95	\$26.95	\$23.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1594	\$129.00	\$115.95	\$102.95

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-5078	\$84.95	\$76.45	\$67.95

## ▼ CLAMP METERS

### CAT III INSULATION TESTER/MULTIMETER

- Analogue/Digital Display
- Data Hold
- Max/Min
- Moulded Case
- Backlit LCD
- Auto Power-Off
- Requires 6 X AA Batteries

Commonly known as a megger and suitable for high voltage insulation testing up to 4 gigahms at up to 1000V. It also has AC/DC voltage and low resistance multimeter functions. Moulded storage case and holster included.



THIS METER  
INCLUDES  
QUALITY  
TEST LEADS



### 3000A TRUE RMS AC HIGH CURRENT CLAMPMETER

- True RMS
- Autoranging
- Flexible loop
- Data Hold
- Min/Max Mode
- Backlit LCD
- Auto Power-Off

Featuring a whopping 3000A measurement capability, the design is a little different from a typical clamp meter. Instead of having a set of "jaws" it has a flexible loop that unclips on one side. Run it around your cable then lock it back into the unit. Features min/max and data hold, and a backlit LCD. It's CATIII 1000V and CATIV 600V rated. Features autoranging to maximise resolution at low currents too.

- Massive 3000A current measurement
- Flexible "clamp" loop



SPECIFICATIONS	QM-1493	QM-1568
Display	4000 count	3000 count
Measurement Cat.	Cat III 1000V	Cat IV 600V / Cat III 100V
Basic VDC Accuracy	0.800%	-
DC Voltage	1000V (± 0.8%)	-
AC Voltage	750 (± 1.2%)	-
DC Current	-	-
AC Current	-	3000A
Resistance	400Ω (± 1.5%)	-
Capacitance	-	-
Frequency	-	-
Inductance	-	-
Temperature	-	-
AC Rectification	-	True RMS
Input Impedance	-	-
Special Features	Insulation Resistance 4M, 40M, 400M, 4000M (± 2%), Continuity Test, Bargraph, Backlit, Data hold, Analogue Bargraph	-
Battery / Fuse	6 x AA (included)	2 x AAA (included)
Dimensions	200(L) x 92(W) x 50(D)mm	270(H) x 105(W) x 28(D)mm (When Closed)

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1493	\$249.00	\$219.00	\$199.00

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1568	\$99.95	\$89.95	\$79.95



## CLAMPMETERS (CONTINUED)

### 600A TRUE RMS AC CLAMPMETER

- AC Current - 600A
- True RMS
- Non contact voltage testing
- Relative measurement
- Frequency measurement
- Capacitance
- Data hold
- Temperature
- Resistance

Ideal for basic AC current measurement. Compact unit at a great price. Carry case included.



LIFETIME GUARANTEE

### 600A TRUE RMS AC/DC CLAMPMETER

- DC Current - 600A
- AC Current - 600A
- True RMS
- Non contact voltage testing
- Relative measurement
- Frequency measurement
- Capacitance
- Data hold
- Temperature
- Resistance

Includes DC current measurement with high accuracy, from a compact unit. This is a price breakthrough for a DC-current capable clampmeter! Carry case included.



LIFETIME GUARANTEE

### 1000A TRUE RMS AC/DC CLAMPMETER

- DC Current - 1000A
- AC Current - 1000A
- True RMS
- Non contact voltage testing
- Relative measurement
- Frequency measurement
- Capacitance
- Data hold
- Temperature
- Resistance

Fantastic features at an amazing price. Ultra-high current 1000A AC and DC current measurement. Carry case included.



LIFETIME GUARANTEE

THIS METER INCLUDES QUALITY TEST LEADS



THIS METER INCLUDES QUALITY TEST LEADS



THIS METER INCLUDES QUALITY TEST LEADS



SPECIFICATIONS	QM-1630	QM-1632	QM-1634
Display	4000 count	4000 count	6000 count
Measurement Cat.	Cat III 600V	Cat III 600V	Cat III 600V
Basic VDC Accuracy	0.5%	0.5%	0.5%
DC Voltage	400mV, 4V, 40V, 400V, 600V (±0.5%)	400mV, 4V, 40V, 400V, 600V (±0.5%)	600mV, 6V, 60V, 600V, 1000V (±0.5%)
AC Voltage	400mV, 4V, 40V, 400V, 600V (±0.8%)	400mV, 4V, 40V, 400V, 600V (±0.8%)	600mV, 6V, 60V, 600V, 750V (±0.8%)
DC Current	-	40A, 400A, 600A (±2.5%)	60A, 600A, 600A, 1000A (±2.5%)
AC Current	40A, 400A, 600A (±2.5%)	40A, 400A, 600A (±2.5%)	60A, 600A, 600A, 1000A (±2.5%)
Resistance	400Ω, 4KΩ, 40kΩ, 400kΩ, 4MΩ, 40MΩ (±1.0%)	400Ω, 4KΩ, 40kΩ, 400kΩ, 4MΩ, 40MΩ (±1.0%)	600Ω, 6kΩ, 60kΩ, 600kΩ, 6MΩ, 60MΩ (±1.0%)
Capacitance	10nF, 100nF, 1μF, 10μF, 100μF, 1mF, 10mF, 100mF (±4.0%)	10nF, 100nF, 1μF, 10μF, 100μF, 1mF, 10mF, 100mF (±4.0%)	10nF, 100nF, 1μF, 10μF, 100μF, 1mF, 10mF, 100mF (±4.0%)
Frequency	10Hz, 100Hz, 1kHz, 10kHz, 100kHz, 1MHz, 10MHz (±0.5%)	10Hz, 100Hz, 1kHz, 10kHz, 100kHz, 1MHz, 10MHz (±0.5%)	10Hz, 100Hz, 1kHz, 10kHz, 100kHz, 1MHz, 10MHz (±0.5%)
Inductance	-	-	-
Temperature	-20 to 1000°C / 0 to 1800°F (±5.0%)	-20 to 1000°C / 0 to 1800°F (±5.0%)	-20 to 1000°C / 0 to 1800°F (±5.0%)
AC Rectification	True RMS	True RMS	True RMS
Input Impedance	10MΩ	10MΩ	10MΩ
Special Features	Non contact voltage, LINE test, data hold, backlight, max value, relative measurement.	Non contact voltage, LINE test, data hold, backlight, max value, relative measurement.	Non contact voltage, LINE test, data hold, backlight, max value, relative measurement.
Battery	3 x AAA	3 x AAA	3 x AAA
Dimensions	72(W) x 194(H) x 35(D)mm	72(W) x 194(H) x 35(D)mm	72(W) x 194(H) x 35(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1630	\$59.95	\$53.95	\$47.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1632	\$99.95	\$89.95	\$79.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1634	\$149.00	\$133.95	\$118.95

## MULTIMETER ACCESSORIES

### FAST ACTING CARTRIDGE FUSES

#### FOR USE IN MULTIMETERS

Used in many well-known multimeters including Listed by Underwriters Laboratories and certified by CSA. Fast acting fuse designed for use in circuits with high AC fault current capacity.

**600V 15A (SUITE FLUKE)** CAT. SF-2274

**600V 1A (SUITE FLUKE)** CAT. SF-2276

Spare ferrule fuses for our IP67 CAT IV rated DMMs:

**1000V 500MA 3AG** CAT. SF-2278

**1000V 800MA 3AG** CAT. SF-2279

**1000V 10A** CAT. SF-2277

Spare fuses for selected Digitech DMM:

**600V 500mA M205** CAT. SF-2269

**500V 10A 3AG** CAT. SF-2272



Suits Fluke DMMs

Note: Not stocked in all stores, but can be ordered.

SIZE(MM)	CURRENT	VOLTAGE	CAT.	Qty 1+	Qty 3+	Qty 6+
20 x 5.0	0.5A	600V	SF-2269	\$3.95	\$3.55	\$3.15
32 x 6.3	0.5A	1000V	SF-2278	\$9.95	\$8.75	\$7.75
32 x 6.3	0.8A	1000V	SF-2279	\$9.95	\$8.75	\$7.75
35 x 10	1A	600V	SF-2276	\$8.95	\$7.95	\$6.95
32 x 6.3	10A	500V	SF-2272	\$9.95	\$8.75	\$7.75
38 x 10	10A	1000V	SF-2277	\$14.95	\$13.35	\$11.70
38 x 10	15A	600V	SF-2274	\$17.95	\$15.95	\$14.35

### PROBE K TYPE THERMOCOUPLE

This plug in thermocouple probe allows you to measure external temperature readings on DMMs. It will measure from below minus 50°C to above 250°C depending on the DMM it is used with. Suitable for gas and liquid, both with good accuracy of 0.75%.



CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1282	\$14.95	\$13.35	\$11.70

### MULTIMETER CARRY CASE

Hard wearing and good looks make this multimeter case perfect for protecting your valuable multimeter from harm. With foam lining to cushion the meter, it zips up tight guarding it from dirty, dusty conditions

- Dimensions: 190(L) x 125(W) x 45(D)mm



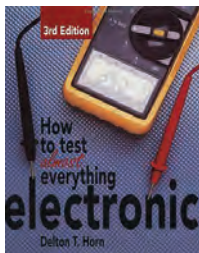
CAT.	Qty 1+	Qty 3+	Qty 6+
HB-6361	\$6.95	\$6.25	\$5.50

### HOW TO TEST ALMOST EVERYTHING ELECTRONIC

Electronics is a unique science - everything that's going on has to be deduced from visible symptoms and effects with very little that is actually physically observable. The book covers everything from setting up a test and work area to using the most important types of test equipment - multimeters, oscilloscopes, signal generators, signal tracers, capacitance meters and frequency counters. It also covers testing and measurement methods, fault finding without circuit diagrams, component testing and some highly specialised measurement in applications such as audio and TV. A comprehensive volume that should be on every technical bookshelf.

- Softcover 326 pages 190 x 130mm

CAT.	Qty 1+
BM-7200	\$49.95



### WIRE TYPE K THERMOCOUPLE WITH TWIN BANANA PLUGS

Similar to our other thermocouples, this one is fitted with banana plug terminations but does not have a "probe" assembly. The thermocouple junction will measure over a wide range of temperature but this will depend on the DMM used.

- Typical thermocouple measurement range from as low as -50°C to over 1200°C



CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1284	\$11.95	\$10.70	\$9.50

### RETRACTABLE 3M ALLIGATOR TEST LEAD SET

Set of 3 heavy duty leads in red, black, and green terminated with insulated alligator clips in a handy retractable reel. 3m in length, it is ideal for testing and troubleshooting electronic systems by connecting from components in machinery to test equipment or bypassing long wiring to isolate a fault.

- Rating when wound: 6A
- Rating when unwound: 10A
- Lead Length: 3m
- Reel Dimensions: 152(Dia) x 20(W)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
WT-5334	\$29.95	\$26.90	\$23.70

### WIRE TYPE K THERMOCOUPLE

This is essentially the same as the probe type shown on this page, except that the sensor is mounted on the end of the cable - no probe. Suits digital multimeters. Measures from below minus 40°C to over 1200°C, actual range depends on the DMM its used with.



CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1283	\$11.95	\$10.70	\$9.50

### JUMPER LEAD KITS STANDARD

Ideal for connecting devices for testing. Alligator clip size is approx 40mm, jaw opening is about 8mm and cable length is approx 400mm.

- 10 leads supplied 2 of each colour

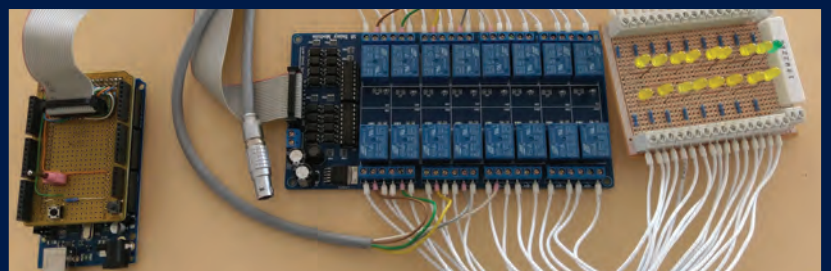


### HEAVY DUTY

This kit has large alligator clips and heavy cable. The alligator clips are approximately 50mm long, and have jaw openings of about 10mm. Cable length is approx 300mm.

- 10 leads supplied, 2 of each colour

CAT.	Qty 1+	Qty 10+	Qty 50+
Heavy Duty WC-6020	\$11.95	\$10.70	\$9.50
Standard WC-6010	\$6.95	\$6.25	\$5.35



### Smart Hardware Competition:

- KEVIN SHACKLETON, SHOPS AT JAYCAR OCONNOR

"This assembly is a cable-testing tool to test all combinations of conductor in a multi-core cable with the conductors at the other end of the cable. It uses a resistor to pass a substantial current. This prototype version used LEDs to indicate continuity and cross-links."



## TEST & JUMPER LEADS

### PARROT™ CLIP LEADS

The Parrot™ Clip is the only test probe that provides both clip-on hands free contact as with an EZ-hook and normal point contact like a test probe. These feature a sprung hook, which is soldered directly to the lead and housed inside a round metal tube. The grip is performed between the 2 metal parts, which can be used as pincers if required. Probes are supplied with 1m leads terminated to banana plugs and are fully insulated to 1000V.



CAT.	Qty 1+	Qty 3+	Qty 6+
WT-5330	\$24.95	\$22.35	\$19.70

### MULTIMETER PROBE ALLIGATOR CLIPS

Turn your DMM probes into clips! These alligator clips simply push onto the end of the test probes!

- Length approximately 55mm
- Jaw opening 8mm
- Sold as a pair - 1 red, 1 black



CAT.	Qty 1+	Qty 3+	Qty 6+
WT-5220	\$3.95	\$3.45	\$3.15

### 16 PIECE TEST LEAD SET

Consists of two leads with screw sockets on each end. Attachments screw in. All colour coded red and black.

- 4 x alligator clips
- 4 x 2mm pin tips
- 4 x banana plugs
- 2 x spade lugs



CAT.	Qty 1+	Qty 3+	Qty 6+
WT-5218	\$9.95	\$8.75	\$7.75

### MULTIMETER TEST PROBES SHROUDED TYPE

- Banana plugs are right angle with 15mm covered pin
- Alligator clips included



	CAT.	Qty 1+	Qty 3+	Qty 6+
Multimeter Test Probes Shrouded Type	WT-5325	\$15.95	\$13.95	\$12.45

### 2MM TEST PROBES FOR MULTIMETERS

- Sold as a pair



	CAT.	Qty 1+	Qty 3+	Qty 6+
Black / Red	PP-0425	\$3.75	\$3.30	\$2.95

### MULTIMETER TEST PROBES

With 4mm right angle unshrouded banana plugs.

- Length 930mm
- Suits QM-1500, etc



	CAT.	Qty 1+	Qty 3+	Qty 6+
	WT-5316	\$4.95	\$4.45	\$3.90

### CAT IV TEST LEAD SET

CAT IV Test Lead Set with straight banana plugs.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	WT-5333	\$11.95	\$10.70	\$9.50

### HIGH QUALITY BANANA PIGGYBACK TEST LEADS

A set of factory-moulded piggy-back style banana plugs, each connected by one metre of high-quality, ultra-flexible 500VDC, 12A rated cable.

- Contains 2 x black, 2 x red and 1 each of blue, yellow and green leads - 7 in all



CAT.	Qty 1+	Qty 3+	Qty 6+
WT-5326	\$29.95	\$26.95	\$23.95

### TEST LEADS

Banana plugs to clip. There are many situations where multimeter probes are difficult to use.

- Length: 700mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	WT-5320	\$5.95	\$5.25	\$4.75

### EZ HOOK TEST CLIPS - 40MM

Suitable for ICs, transistors, PC pins, etc. Push syringe action. Hirshmann style.



	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	HM-3036	\$1.75	\$1.55	\$1.40
Black	HM-3037	\$1.75	\$1.55	\$1.40

### IC TEST CLIPS

These have a syringe action and are ideal for working with small components. Length 57mm.



	CAT.	Qty 1+	Qty 10+	Qty 50+
Red	HM-3040	\$1.95	\$1.75	\$1.55
Black	HM-3041	\$1.95	\$1.75	\$1.55

### PROFESSIONAL CAT IV MULTIMETER PROBES

Professional multimeter test probes have always been an expensive choice so what we've done is work closely with a manufacturer to get great quality probes at a genuinely affordable price! To start with, we've made them extra long; they're 1200mm long so you don't drag your meter across your workbench as you move around a circuit and makes them perfect for bench top meters. They're Cat IV rated for safety, feature finger guards and can handle 20A of current. The best part is the actual probes themselves. To start with, the probes are suitable for inserting into a standard 4mm banana socket using the same spring hold system. Also included are probe covers which not only stop the sharp points being dangerous, they allow only just the tip to be exposed for delicate work where you can be in danger of making a short between two connections which are close together.

- Extra long 1200mm
- 600V Cat IV rated
- 20A current rating

Probes suitable for inserting (and holding) in 4mm banana sockets. Probe safety cover with slot for delicate work. Comfortable and ergonomic grip. Sold as a pair.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Pair	WT-5338	\$21.95	\$19.75	\$17.75

### CAT III RATED BANANA ALLIGATOR PLUGS

Takes standard and fully insulated 4mm banana plugs and turns them into an alligator clip.

- CATIII rated
- Sold as a pair, red and black



	CAT.	Qty 1+	Qty 10+	Qty 50+
Pair	PA-3696	\$9.95	\$8.75	\$7.75

### ALLIGATOR CLIPS

- Sold as a pair
- 1 x red & 1 x black



		CAT.	Qty 1+	Qty 10	Qty 50
26mm·	Pair	HM-3020	\$1.50	\$1.35	\$1.20
32mm	Pair	HM-3022	\$1.95	\$1.75	\$1.55

### ALLIGATOR CLIPS WITH SCREW

No soldering required. Large alligator clips with plastic finger grips and a screw for connection.

- Length: 55mm
- Max jaw opening 12mm
- Sold as a pair or singly



	CAT.	Qty 1+	Qty 10+	Qty 50+
Alligator Clips with Screw	HM-3025	\$2.45	\$2.15	\$1.95



## HANDHELD OSCILLOSCOPES

### 10MHZ RECHARGEABLE HANDHELD POCKET SCOPE

- Hand Held
- Rechargeable
- Durable Rubber Surround
- 6 Hour Run Time
- Backlit Display
- Memory Storage for 2 Signals
- Full Auto Range Operation
- Includes CRO Probe

Limited Stock.

A vital piece of test equipment for hobbyists, students, technicians, or designers, the Velleman HPS140 pocket scope is a complete portable oscilloscope with a tiny size. With dozens of features found on full size digital oscilloscopes you'll be amazed how they squeezed all of it into a package a little larger than a Smartphone. It's impressive list of features include full auto range operation, input sensitivity down to 1mV, real time sample rate up to 40MS/s, and bandwidth up to 10MHz. Aside from the standard scope features it also has some nifty tools including on screen markers for measurement of amplitude and time, RMS power measurement on audio speakers from 2 to 32 Ohms, hold function for the current display, and memory storage for 2 signals which are retained even after shutdown. The unit is housed in a durable rubber surround and the screen is LED backlit for easy viewing. An in-built Ni-MH battery gives up to 6 hours of run time and can be recharged with the included USB charge cable or a 9VDC plugpack (not included use Cat. MP-3146). Supplied with 1:1/1:10 CRO probe and USB charge cable.



SPECIFICATIONS	QC-1914
Bandwidth	10MHz
Real Time Sample Rate	40MS/s
Max Input Voltage	100Vp AC or DC
Input Coupling	DC, AC, and GND
Timebase Range	250ns to 1 hr per division in 32 steps
Input Range	1mV to 20V per division in 14 steps
Display Size	50(W) x 25(H)mm
Display Resolution	Full 128(W) x 64(H) pixels, Signal 118(W) x 49(H) pixels
Accuracy	+/-2.5%
Weight	200g
Battery	Inbuilt 4.8V Ni-MH rechargeable
Battery Life	Up to 6hour
Recharge	9VDC 200mA from included USB charge cable or plug-pack (available separately Cat. MP-3146)
Dimensions	114(H) x 74(W) x 29(D)mm

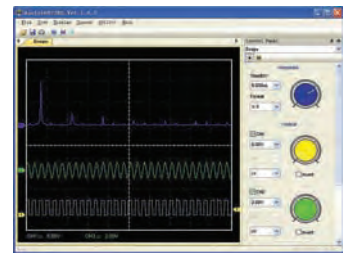
	CAT.	Qty 1+
10MHz Pocket Scope	QC-1914	\$199.00

## USB OSCILLOSCOPE

### 20MHZ USB OSCILLOSCOPE

This unit does away with more of the hardware and provides a highly accurate interface to allow software to provide the display. It still provides 20MHz bandwidth and high accuracy and physical probe couplings, but takes up a fraction of the bench-space. Use the included software to provide just about all standard oscilloscope functions, and even output waveforms to excel/word files. Convenient function in a small form factor, ideal for the traveling or compact workbench.

- USB interface plug & play
- Automatic setup
- Waveforms can be exported as Excel/Word files
- Spectrum analyser (FFT)
- Cursor measurements



SPECIFICATIONS	QC-1929
Channels	2
Input Impedance	1MΩ
Bandwidth	20MHz
Sampling Rate	48M Sa/Sec
Input Coupling	DC
Max Input Voltage	±5V
Triggers	Rising edge falling edge
Trigger Modes	Auto, Normal, Single
Math Operations	Add / subtract / multiply / divide / FFT
Sensitivity	20mV/div - 5V/div
Resolution	8bit
DC Accuracy	+/- 3%
Operating System	Windows XP/Vista/7/8/10
Dimensions	206(W) x 123(D) x 37(H)mm
Weight	375g
Accessories	2 x 10:1 probes, software, USB cable

	CAT.	Qty 1+	Qty 2+	Qty 5+
20MHz USB Oscilloscope	QC-1929	\$199.00	\$178.95	\$158.95

## Tech Talk: 2000 & 5000 Count - What Does It Mean?



For the first time user, the specifications on a DMM can be very confusing, particularly the display functions. So what does 3.5 or 4.5 digit mean or what does 2000 count mean? DMMs display readings to several decimal places, depending on the accuracy, and the number of digits is the display span of the meter. A basic DMM may appear to have 4 digits, but the maximum reading it will display 1999. On the 2V range, for example, the display will read a maximum of 1.999 before it switches to a higher range - assuming it's an autoranging meter. Because the most significant digit can only indicate 1 (1.999), it's called half a digit, so most DMMs have a 3.5 digit display. A meter that can read up to 3999 before it changes has

a 4000 count display. Safety categories can also cause confusion:

- Cat I:** Applies to circuits not connected to mains voltage
- Cat II:** Circuits directly connected to mains voltage such as household appliances
- Cat III:** Circuits connected to mains voltages in a building installation - mains wiring, switchboards etc.
- Cat IV:** The source of the mains voltage installation - power lines, transformers and sub-stations

You'll notice that some DMMs have more than one rating. This isn't a misprint of mistake. Remember that the category refers to the nature of the installation, not necessarily only the voltage in the installation. For example, a Cat III installation may include three phase voltages of 415V and single phase of 240V. A device rated for Cat II 600V is not suitable for use on this installation, in spite of the fact that its voltage rating is suitable - a Cat III device rated above the specified voltage is required.

## DIGITAL STORAGE OSCILLOSCOPES

### 100MHZ DUAL CHANNEL OSCILLOSCOPE WITH DIGITAL STORAGE

This is a lightweight and compact unit featuring a large 7-inch colour-LCD for detailed readings. It also includes a waveform generator for various testing applications. By connecting it to your computer via the provided USB cable, you can use the included software for even greater control and data storage options.

- Two channel
- High accuracy
- Powerful Trigger
- Independent Waveform generator
- Synchronized signal Output/Input
- USB host and device connectivity
- Support SD card

See page 253 for our USB Oscilloscope.



SPECIFICATIONS	QC-1936
Channels	2
Bandwidth	100MHz
Sampling Rate	1G Sa/Sec
Input Coupling	AC / DC / GND
Max Input Voltage	CAT II 300VRMS AC/DC Max
Triggers	Edge, Video, Pulse Width, Pulse, Slope, Over time, Alternative
Trigger Modes	Auto, Normal, Single
DC Accuracy	+/- 3%
Data Record Function	Yes
Memory Depth	40K
DISPLAY	
Type	7" colour TFT LCD
Resolution	800 x 480
Contrast	Adjustable
Graticule	8 x 16 div

<b>VERTICAL</b>	
Sensitivity	2mV - 5V/div
Resolution	8 bit
Rise time	3.5ns
Mathematical operations	Add / subtract / multiply / divide / FFT
FFT	Hanning, Flattop, Rectangular, Bartlett, Blackman
<b>HORIZONTAL</b>	
Time Base	4ns/div to 40s/div
<b>WAVEFORM GENERATOR</b>	
Frequency range	1Hz-25MHz
Waveforms	Sine, Square, Ramp, Trapezium, AM/FM, Arbitrary, Exponent
Resolution	12 bits
Depth	4Ksa

	CAT.	Qty 1+	Qty 2+	Qty 5+
100MHz Dual Channel Oscilloscope with Digital Storage	QC-1936	\$899.00	\$809.00	\$719.00

## OSCILLOSCOPES PROBES

### OSCILLOSCOPE PROBE - 10 :1 / 1:1

Passive high impedance oscilloscope probe designed and calibrated for use with instruments having an input impedance of 1MΩ shunted by 20pF. It may be compensated for use with instruments having an input capacitance of 15 to 35pF. The probe incorporates a three-position slide switch in the head, which selects attenuation of x1, x10 or a ground reference position. This probe suits all of the oscilloscopes in our range. Supplied with sprung hook, channel identifier clip, ground lead, insulating tip, IC tip and adjusting tool.



**POSITION REF  
PROBE TIP GROUNDED VIA 9M-Ω  
RESISTOR, OSCILLOSCOPE INPUT  
GROUNDED.**

SPECIFICATIONS	POSITION X10	POSITION X1
Attenuation Ratio	10:1	1:1
Bandwidth	DC to 100MHz	
Rise Time	3.5ns	
Input Resistance	10MΩ when used with oscilloscopes with 1MΩ input	1MΩ (oscilloscope input resistance)
Input Capacitance	14pF (approx.)	
Compensation Range	10 to 35pF	
Working Voltage	300VDC incl. Peak AC derating with frequency	600V incl. Peak AC derating with frequency
Cable Length	1.4m	
Certification	Safety Meets IEC1010-1 CAT.I	

	CAT.	Qty 1+	Qty 2+	Qty 5+
	QC-1902	\$39.95	\$35.90	\$31.90

## BENCH VOLTMETER

### ANALOGUE BENCH VOLTMETER 0-15V

A handy bench volt meter with analogue dial and banana plug connections. Reminiscent of the volt meters you might see in a school physics lab, this volt meter gives a quick and easy to read display of volts, and is ideal as a permanent fixture on a test bench, with a 15V maximum reading be suitable for automotive part testing.

- Choose either 3V and 15V scales via separate banana plugs
- 3V scale reads -1V to 3V
- 15V scale reads -5V to 15V
- Zero offset adjust
- Analogue movement
- Internal resistance: 3kΩ (3V scale) 12kΩ (15V scale)



	CAT.	Qty 1+	Qty 3+	Qty 6+
Bench Voltmeter	QP-5040	\$19.95	\$17.95	\$15.95

## NON-CONTACT THERMOMETERS

### ECONOMY THERMOMETER

- Built-in laser pointer
- Wide temperature range
- 8:1 Distance to spot ratio
- Auto data hold
- Carry case included

Safely measure temperature in hard to reach places, hot or hazardous areas using the built-in laser pointer to target the surface. Compact and easy to use, the thermometer can provide several readings within seconds. Backlighting illuminates the LCD display for taking measurements at night or in low light areas. Carry case included.



### NON-CONTACT THERMOMETER WITH DUAL LASER TARGETING

- Laser pointing targeting
- Wide temperature range
- 12:1 Distance to spot ratio
- Backlit LCD
- Holster Included

Measure the temperature of any surface from a safe distance with this compact sized non-contact thermometer. With a wide temperature range and laser targeting, this portable instrument is easy to use for quick and accurate temperature checking of any surface. With a 12:1 distance to spot size, you can get the temperature of almost the exact spot in most cases. With the backlight, the temperature can be read in low light conditions.



### PROFESSIONAL HIGH TEMPERATURE THERMOMETER

- Supplied in a robust blow-moulded case
- Wide temperature range

- 30:1 distance to spot ratio
- Backlit LCD
- Auto data hold
- Professional grade



This professional infrared thermometer allows you to measure high temperatures with safety. With a range of -50 to 1000° Celsius, it's suitable for lab, furnace, forge and small-scale foundry work. The laser pointer allows for accurate placement of the measurement point and the 30:1 distance-to-target ratio allows for accurate measurement from greater distances. The unit can be mounted on a tripod with trigger lock for unattended min/max logging.

- Supplied in a robust blow-moulded case



SPECIFICATIONS	QM-7215	QM-7221	QM-7226
Display	3 digit	3.5 digit	4.5 digit
Optical Resolution	8:1	12:1	30:1
Temperature	-30°C to 260°C / -22°F to 500°F	-50°C to 650°C / -58°F to 1202°F (±1%)	-50°C to 1000°C / -58 to 1832°F (±1.5%)
Emissive	Fixed to 0.95	Adjustable 0.10 to 1.0	Adjustable 0.10 to 1.0
Sampling Rate	< 1s	6.7Hz	1Hz
Special Features	Built-in laser pointer, auto data hold, back light, min/max record, over range indicator	Dual laser targeting, dual display, automatic data hold, back-light, trigger lock, max hold, high/low alarm	Laser targeting, automatic data hold, dual display, back light, trigger lock, min / max / dif / avg record, high / low alarm.
Battery	1 x 9V	1 x 9V	1 x 9V
Dimensions	131(H) x 96(W) x 35(D)mm	146(L) x 104(W) x 43(D)mm	230(L) x 120(W) x 56(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-7215	\$59.95	\$53.95	\$47.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-7221	\$139.00	\$124.95	\$110.95

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-7226	\$249.00	\$223.95	\$198.95

### MINI NON-CONTACT IR IP67 THERMOMETER

Ultra compact, non-contact thermometer. IP67 rated so is ideal for industrial and lab applications. LCD readout gives temperature in Celsius or Fahrenheit.

- Batteries & lanyard included

SPECIFICATIONS	QM-7218
Temperature	-33°C to 110°C (-27 to 230°F)
Accuracy	2.5°C
Distance To Spot Ratio	1:1
Response Time	1 second
Size	82(L) x 17(Dia)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
QM-7218	\$34.95	\$31.45	\$27.95

### DIGITAL THERMOMETER WITH K-TYPE THERMOCOUPLE

- LCD
- Pocket Size
- Wide Temperature Range
- Thermocouples included
- Battery included

A handy pocket-size digital thermometer, suitable for the lab, workshop or in the field. It features an excellent measurement range from -50 to 750°C and a hold function to lock the reading on the display.



SPECIFICATIONS	QM-1602
Display	2000 count
Temperature	-50°C to 750°C (±1%)
Sampling Rate	2.5Hz
Special Features	Data hold
Battery	2 x AA (supplied)
Dimensions	118(L) x 70(W) x 29(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1602	\$39.95	\$37.45	\$31.90

## Tech Talk: Distance To Spot Ratio Explained

Distance to spot ratio is the ratio of the distance of the Thermometer to the object being measured, and the diameter of the temperature measurement area. The larger the ratio number the better the resolution.





## PROBE THERMOMETERS

### LCD PROBE THERMOMETER

- Pocket clip
- Stainless steel probe
- 150mm long

Multi-purpose digital thermometer for the kitchen, lab, factory, workshop or barbecue. It measures in Celsius and Fahrenheit and fits in a pocket.



SPECIFICATIONS	QM-7314
Temperature	-50°C to 120°C, -58°F to 248°F
Accuracy	±/-1°C
Length	150mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-7314	\$10.95	\$9.85	\$8.75

### DIGITAL STEM THERMOMETER

- Requires LR44 battery (included) / 5000 hour battery life
- 205mm long

Endless applications such as food processing, laboratory work, photography, home brewing etc. This digital thermometer features fast response, min/max memory, data hold and automatic shut-off after 10 minutes. The probe is stainless steel, so it will never corrode, the body is splashproof and it will never need calibration.



SPECIFICATIONS	QM-7216
Temperature	-50°C to 200°C / -58°F to 392°F
Accuracy	±1°C, ±2°F
Display Resolution	0.1o
Sampling Rate	Every 07 seconds



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-7216	\$29.95	\$26.95	\$23.95

### THERMOCOUPLE THERMOMETER - 2 INPUT

- Auto power off & backlight LCD
- Max and hold function
- Celsius & Fahrenheit
- Holster included
- Thermocouples included

Fast response and laboratory accuracy, works with K-type thermocouples and offers 0.1 or 1° userselectable resolution over the entire measurement range. You can monitor two separate temperatures or use the differential function to compare them.

SPECIFICATIONS	QM-1601
Display	2000 count
Temperature	-50°C to 1300°C (-58°F to 2000°F)
Special Features	Back light, data hold, max hold
Battery	1 x 9V
Dimensions	172(L) x 84(W) x 42(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-1601	\$94.95	\$85.45	\$75.95

## FRIDGE THERMOMETERS

### DIGITAL FRIDGE/FREEZER LCD MINI THERMOMETER

See at a glance that your favourite food or beverage is at the correct temperature in the fridge or freezer. Hang it from a wire shelf, stand on a shelf or attach to a metal surface with the built-in magnet. Stylish design with white face and silver colour surround.

SPECIFICATIONS	QM-6323
Selectable	°C / °F
Digit Height	23mm
Temperature Range	-19°C to 49°C
Batteries	1 CR2025 included
Dimensions	68(L) x 44(H) x 12(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-6323	\$9.95	\$8.75	\$7.75

## USB TEMPERATURE / HUMIDITY DATALOGGERS:

A must for anyone involved with food preparation, archiving or storage or applications where storage of environment information is important. These USB dataloggers log temperature and humidity readings and store them in internal memory for later download to a PC. The measurement interval is adjustable - you simply set up the recording parameters then download the data when you need it. The data is recorded at the prescribed intervals and will alert you if preset min/max levels are exceeded. Countless applications including greenhouses, museums, warehouses, container storage, photography, archives, food preparation etc.

### DIRECT PLUG IN TYPE

- Easy USB interface
- Mounting bracket included
- 32000 sample memory (16000 temp, 16000 humidity)
- Software compatible with Windows 2000, XP, Vista



SPECIFICATIONS	QP-6013	
Range	-40°C to 70°C (-40°F to 158°F), 0 - 100% relative humidity	1 YEAR WARRANTY
Accuracy	Humidity ±3%, Temperature ±1°C	
Resolution	Humidity 0.1%, Temperature 0.1°C	
Memory	3200 samples	
Battery Life	5 sec rate: 12 months, 10 sec rate: 2.5 years	
Dimensions	100(L) x 22(W) x 20(H)mm	

	CAT.	Qty 1+	Qty 3+	Qty 6+
Direct Plug In Type	QP-6013	\$119.00	\$106.95	\$94.95

### USB / LCD READOUT TYPE

- 32,700 sample memory
- Adjustable measurement cycle
- Analysis software included
- Software compatible with Windows 2000, XP, Vista



SPECIFICATIONS	QP-6014	
Range	-40°C to +70°C (-40°F to 158°F), 0 - 100% relative humidity	1 YEAR WARRANTY
Accuracy	Humidity ±3%, Temperature ±1°C	
Resolution	Humidity 0.1%, Temperature 0.1°C	
Memory	32,700 samples	
Measurement Cycle	1s - 24h	
Dimensions	95(L) x 50(W) x 32(H)mm	

	CAT.	Qty 1+	Qty 3+	Qty 6+
USB / LCD Readout Type	QP-6014	\$149.00	\$133.95	\$118.95

### DIGITAL THERMOMETER FOR FRIDGE OR FREEZER

Simply attach the sensor in the fridge or freezer and the thermometer on the outside with the attached magnets or enclosed Velcro strip. Set your preferred reading of °C or °F and then set the minimum and maximum temperatures with the alarm. If the fridge goes below or above these set temperatures the alarm will sound until you manually turn it off to investigate the problem. 1m cable.

- Shows room temperature at the touch of a button

SPECIFICATIONS	QM-7209	
Room Temp Range	-10°C to 50°C	1 YEAR WARRANTY
Fridge Temp Range	-50°C to 70°C	
Display Size	26(W) x 13(H)mm	
Requires	1 x AAA battery (supplied)	
Dimensions	67(W) x 39(H) x 15(D)mm	



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-7209	\$24.95	\$22.45	\$19.95

## SOUND LEVEL METERS

### MICRO SOUND LEVEL METER

- Very compact size
- Min / max hold
- Backlit

With a range of 40 - 130dB, this little meter is ideal for environmental, safety and sound system testing. It has a fast response time for transient measurements and is A-weighted for the frequency range of human hearing.

- Extremely small and price matches its size



DIGITAL FOR AN  
ANALOGUE PRICE!

SPECIFICATIONS	QM-1591
Display	3 digit
Range	40 - 130 dB ( $\pm 3.0$ dB)
Frequency Range	31.5Hz to 8kHz
Weighting	A weighted
Special Features	Pocket sized, min / max hold, back light
Battery	1 x 9V (included)
Dimensions	128(L) x 51(W) x 32(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1591	\$49.95	\$44.95	\$39.95



### Smart Hardware Competition:

- WILL THEW, SHOPS AT JAYCAR CHRISTCHURCH

"Working on a custom led controller Where I make a led board usable again"

### COMPACT DIGITAL SOUND LEVEL METER

- Supplied with carry case and wind sock.
- Compact size
- Data hold
- Backlit
- Carry case

Featuring a wide dynamic range from 30 to 130dB, it can measure both A and C weightings to get the right response for the human ear and can have fast or slow responses to get an "ambient" reading or a short noise. Includes data hold and min/max functions, as well as tripod mount for prolonged use. Great for car audio installers, clubs and PA.



SPECIFICATIONS	QM-1589
Display	3.5 digit
Range	30-130dB ( $\pm 1.5$ dB)
Frequency Range	31.Hz to 8kHz
Weighting	AC selectable weighting
Response	Fast / slow selectable
Special Features	Max hold, data hold, back light
Battery	1 x 9V
Dimensions	210(L) x 55(W) x 32(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1589	\$129.00	\$115.95	\$102.95

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.

### PRO SOUND LEVEL METER WITH CALIBRATOR

- Compliant with Type 2 (Class 2) Standards
- A & C weighting scales
- Fast and slow response
- Tripod mounting thread
- External calibrator (included)
- Maximum hold feature
- Min/Max measurement
- AC & DC analogue outputs
- Tripod included
- Backlit LCD

1  
YEAR  
WARRANTY

Suitable where accuracy, repeatability or validation is required. This sound level meter also includes a calibrator so you can verify and authenticate your results. Scales for A and C weighting are included so it is ideal for vehicle noise testing, race scrutineering, traffic or aircraft noise testing or any evidence-based noise testing. Rugged and easy to operate for the garage environment, it also has both AC (1Vrms) representation of the meters waveform) and DC (10mV/dB) analogue outputs so you can connect it to other equipment such as data-loggers, plotters, oscilloscopes etc.



APPROVED TYPE 2 (CLASS 2)  
THIS METER CONFORMS TO IEC 61672-1  
CLASS 2 FOR SOUND LEVEL METERS.

SPECIFICATIONS	QM-1592
Display	3.5 digit
Accuracy	$\pm 1.4$ dB
Calibration	94, 114dB
Dynamic Range	50dB
Resolution	0.1dB
Update	Every 0.5 seconds
Frequency Range	31.5Hz - 8kHz
Dimensions	278(L) x 76(W) x 50(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1592	\$379.00	\$339.00	\$299.00

## ✓ LIGHT METERS

### DIGITAL LIGHTMETER

A handy digital lightmeter for photography, lab work, architectural, engineering and construction applications. It includes an integrated stand and will measure

- LCD
- 3.5 Digit
- Separate Photo Detector incident light in 4 ranges. The photo detector is wired on a curly cord which extends to 1 metre, allowing the user to take light measurements at the optimum position. Sensor cover and carry case included.



SPECIFICATIONS	QM-1587
Display	2000 count
Range	200, 2000, 20000, 50000 lux/Fc
Accuracy	±5%±10d (<10,000 lux) ±10%±10d (<10,000 lux)
Resolution	0.1lux/Fc
Sampling Rate	1.5Hz
Special Features	Data hold, max hold
Battery	1 x A23 (12V)
Dimensions	188(L) x 64(W) x 24.5(D)mm
Photo Detector	115(L) x 60(W) x 27(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-1587	\$59.95	\$53.95	\$47.95

### PROFESSIONAL DIGITAL LIGHT METER

- Data Hold
- Relative Mode
- Auto Zeroing
- Long-Life Silicon Photo Diode Sensor
- Selectable Lux Or FC Scale
- Auto Power Off: 30 Minutes
- Max And Min Measurements

Light has an enormous impact on the atmosphere created in a room, office, foyer, retail shop, reception areas, or on film and photography. In some cases, a professionally lit servicescape may be the difference between business success and failure. Achieving the right amount of light is a fine art, and the help of a professional tool should be sought to ensure minimum lighting level standards are achieved. This professional light meter is brimming with features that should be part of every lighting technician's arsenal. It uses photopic spectral sensitivity which closely mimics the response of the human eye to changes in light. It is extremely accurate with a rapid response and can store min and max values for easy comparisons. Measurement can be switched between LUX and FC (foot candles) and a data hold function is included for pausing the reading. All this is output to an easy to read backlit LCD. A carry plastic case with handle is included for easy and safe transportation.



SPECIFICATIONS	QM-1584
Display	4,000 count with 41 segment bargraph
Max Measurement	400,000 lux / 40.00 kFc
Spectral Response	CIE Photopic
Spectral Accuracy	CIE VA function f1 <=6%
Cosine Response	f2 <=2%
Accuracy	±/-5% ±/-10d (<10,000 lux), ±/-10% ±/-10d (>10000 lux)
Accuracy For C.I.E Standard Illuminance	A(2856K)
Sampling Rate	1.5 times/second



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-1584	\$169.00	\$151.95	\$134.95

## ✓ OTHER TEST EQUIPMENT

### POCKET MOISTURE METER - WOOD, BUILDING, ETC.

This is an intelligent wood moisture meter suitable for measuring water content in building materials and wooden fibre articles such as wooden and bamboo objects, cotton, paper etc. Simple to use, the unit comes with two-pin electrode which enables you to check thick wood at the core without having to cut it open. A must have for home/building inspectors, flooring specialist and general contractors. Carry case included.

- Backlit digital LCD screen
- Ergonomically designed with comfortable finger grip
- Low power consumption
- Auto power off



SPECIFICATIONS	QP-2310
Electrode Length	8mm
Measuring Range	Woo: 6 to 44%, Material: 0.2 to 2.0%
Accuracy	Wood ±/-2%, Material: ±/-0.2%
Ambient Temperature	0 to +40°C
Ambient Humidity	0 to +85%rh
Battery	4 x LR44 (included)
Dimensions	96(H) x 40(W) x 20(D)mm, 83g

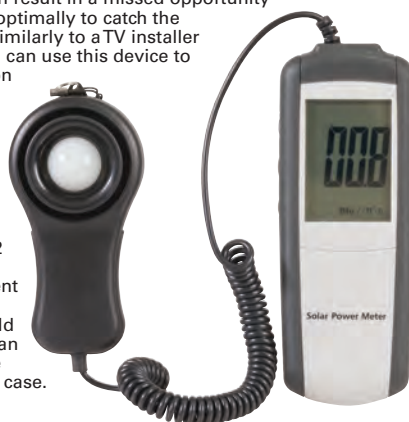


WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
Pocket Moisture Meter	QP-2310	\$34.95	\$31.45	\$27.95

### SOLAR POWER METER

Installing solar panels can result in a missed opportunity if they're not positioned optimally to catch the radiation from the sun. Similarly to a TV installer using a signal meter, you can use this device to find optimum locations on a rooftop (or wherever you're installing them) to help ensure they'll be efficient and generate as much of their rated power possible for your location. Expressed as either W/m2 (Watts per square metre), or BTU/ft2 (British thermal units per square foot). Measurement up to 1999W/m2, or 634BTU/ft2. With data hold and high accuracy, you can get rapid readings on the huge LCD. Includes carry case.



SPECIFICATIONS	QM-1582
Range	0-1999W/m2, 634BTU/ft2
Resolution	1W/m2; 1 BTU/ft2
Sampling Time	0.25 Seconds approx
Power	3 x AAA batteries (Included)
Dimensions	63(W) x 162(H) x 28(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Solar Power Meter	QM-1582	\$129.00	\$116.00	\$103.00

### HAND HELD PH METER

A simple and accurate device for checking pH levels in water. The unit is equally valuable for keeping your fish tank at the proper pH level for optimum fish health or checking your swimming pool for the right balance. The meter is simple to use and the large liquid crystal display gives clear and precise readings that are much more accurate than messy chemicals. The unit has an extendable probe that can be adjusted to suit each application. The meter is supplied with a 9 volt battery, a bottle of pH 7.0 buffer solution and calibration tool.



SPECIFICATIONS	QM-1670
Range	1 - 14 pH
Resolution	0.1 pH
Accuracy	±0.2 pH
Operating Temperature	0° - 50°C
Weight	120g
Dimensions	40(W) x 158(H) x 34(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
Hand Held pH Meter	QM-1670	\$64.95	\$58.50	\$51.95
Buffer Solution (50ml)	QM-1671	\$8.95	\$7.95	\$6.95



## ▼ AUTOMOTIVE TEST EQUIPMENT

### SELF POWERED ROUND LED VOLTMETER 5-30VDC

Quite possibly the easiest way to monitor your battery voltage, or the voltage in any DC powered system. Simply wire up to a positive and negative DC power source of 5-30VDC, and the voltmeter tells you the voltage (taking power from the DC source to operate). Supplied with a panel mount and a surface mount "hood". Connection is via 6.3mm spade terminals.

- Voltmeter: 36(Dia) x 26(D)mm
- Panel mount: 60(W) x 42(H)mm
- Surface mount hood: 55(W) x 80(L) x 50(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
LED Voltmeter	QP-5582	\$22.95	\$20.35	\$18.35

### PANEL/SURFACE MOUNT LED VOLTMETER & AMPMETER

Quite possibly the easiest way to monitor battery voltage and current draw on your van, RV or boat. Simply follow the included wiring diagram to measure 5-30VDC, and 0 to 10A DC. Supplied with a panel mount and a surface mount "hood". Connection is via three 6.3mm spade terminals (current shunt built-in).

- Volt/Current Meter: 36(Dia) x 40(D)mm
- Panel Mount: 60 (W) x 42 (H)mm
- Surface mount hood: 55(W) x 80(L) x 50(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Volt & Amp Meter	QP-5584	\$39.95	\$35.90	\$31.90

### LED VOLTMETER 5-15VDC WITH BAR GRAPH

A quick and simple way to monitor the battery voltage in a vehicle, this voltmeter simultaneously shows the voltage numerically and on a bar graph. Simply wire up to a DC power source between 5-15VDC, and the blue LED voltmeter displays the voltage. The colour coded LED bar graph shows the voltage level on a scale from 11.3 to 13.2 volts, optimal for vehicle battery condition. Supplied with a panel mount and a surface mount "hood". Connection is via 6.3mm spade terminals.

- Voltmeter: 36(Dia) x 26(D)mm
- Panel mount: 60(W) x 42(H)mm
- Surface mount hood: 55(W) x 80(L) x 50(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Voltmeter	QP-5589	\$39.95	\$35.95	\$31.95

### CIGARETTE LIGHTER BATTERY MONITOR

Check the voltage output of your car's battery quickly and easily. Simply plug this handy voltmeter into the cigarette lighter socket and get an instant readout of the electrical system's voltage.

- Display resolution: 0.1V
- Accuracy: +/- 2%
- Operating voltage: 8 - 30VDC



	CAT.	Qty 1+	Qty 5+	Qty 10+
Battery Monitor	QP-2220	\$19.95	\$17.95	\$15.95

### DUAL BATTERY LED VOLTMETER

Monitors two power sources at once - ideal for dual battery installations. Includes flush panel-mount and surface-mount hardware. Voltage range is 10-60VDC, so it's suitable for some higher voltage (eg, 48V) solar installations too, to potentially monitor PV and battery voltage simultaneously.

- Operating Voltage: 10-60VDC
- Dimensions: 49(D) x 35(Dia).mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
2 x LED Voltmeter	QP-5583	\$29.95	\$26.95	\$23.95

### CIGARETTE PLUG ALTERNATOR / BATTERY MONITOR

Having car batteries or alternators diagnosed and fixed can be unnecessarily expensive, both sit firmly in the realm of DIY. Replacing an alternator can cost up to \$300, when in fact all that may need to be replaced is a \$20 voltage regulator. This device will help you diagnose the source of your cars electrical problems and potentially save you a lot of money. It simply plugs into your car's cigarette lighter socket and will present you with alternator and battery status. For full specifications see our website.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Alternator/Battery Monitor	PP-2142	\$9.95	\$8.75	\$7.75

### 12V CAR VOLTAGE, ALTERNATOR & TEMPERATURE DISPLAY

Plugs into the car's cigarette lighter socket to display the car's battery voltage and inside temperature. An audible and visual alarm can be set to trigger when the car's battery voltage dips too low, which could save you from breaking down in the middle of nowhere with a dead car battery. The display features a tricoloured LED to show the battery status and electrical system status at a glance. Stylish modern design allows for easy dash mounting. Celsius or Fahrenheit temperature display.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Temperature Display	XC-0117	\$49.95	\$49.95	\$49.95

### LOW VOLTAGE CIRCUIT TESTER 6, 12, 24 VOLTS

Looks like a neon test screwdriver but instead of a blade on the end this tester has a probe and a 28" lead which clips to ground. Suitable for 6/12/24 volts for use on cars, trucks, boats, etc



See our Wireless Tester on page 260

	CAT.	Qty 1+	Qty 3+	Qty 6+
	TD-2049	\$3.95	\$3.45	\$3.15

### 3 - 28V PRO GRADE AUTOMOTIVE TESTER

This professional grade cordless voltage tester is designed for used on modern cars. The voltage tester detects from 3 to 28 volts. It will light up and buzz when positive voltage is detected. Made from rugged chrome metal construction it is safe to use with ECMs, air bags, sensors, transducers etc. The circuit tester does not require a ground wire or clip, so it is easy to check in hard to reach places. A probe is supplied with a V-Groove tip to make piercing wire insulation safe. N size battery included (replacement batteries use SB-2346).



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QP-2212	\$16.95	\$15.25	\$13.55

### AUTOMOTIVE MULTI-FUNCTION CIRCUIT TESTER WITH LCD

Designed to test the electrical system of an automotive vehicle running on 12V or 24V. One of the great features is being able to activate components with positive or negative without using a jumper wire. To top it all off the easy to read LCD is backlit so it's perfect for the dark crevices of an engine bay. All the features of a brand name unit at a fraction of the price. For full specifications see our website.

- Works on 12 or 24V systems
- Dimensions: 240(L) x 78(H) x 40(W)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-1494	\$64.95	\$58.45	\$51.95

## AUTOMOTIVE TEST EQUIPMENT (CONTINUED)

### BATTERY, CHARGER & ALTERNATOR TESTERS

These handy devices quickly indicate the condition of your car or truck battery, charger or alternator. They use 3 LEDs to indicate battery and charge under engine on/engine off conditions. Compact and lightweight, they include 600mm leads with crocodile clips, and an inbuilt magnet to secure the unit while taking measurements.

• Dimensions: 120(L) x 33(W) x 20(D)mm



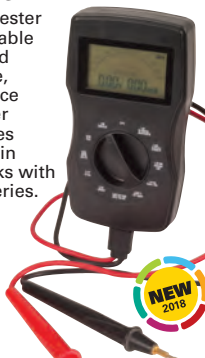
CAT.	Qty 1+	Qty 3+	Qty 6+
QP-2258	\$12.95	\$11.35	\$10.35

### SPECIALIST UNIVERSAL LCD BATTERY TESTER

Never trash a good battery again! This universal tester provides testing for most types of small rechargeable batteries, including a huge range of Lithium-based (LiFePo4, Li-Ion etc) batteries. You can test voltage, capacity, and internal resistance. Internal resistance is usually tied to the current charge level, however generally increases with a battery's age, it provides a good indication of battery health, most notably in Lithium-based rechargeable batteries. It also works with alkaline and various other non-rechargeable batteries.

- Tests over 11 types of batteries including cylindrical and button cells
- Test battery voltage, capacity (%), and internal resistance
- Weight: 161g (Incl. Cables)
- Cable Length: 720mm
- Dimensions: 75(W) x 135(H) x 28(D)mm

See website for full specifications.



CAT.	Qty 1+	Qty 4+	Qty 10+
QP-2260	\$39.95	\$35.95	\$31.95

### DIGITAL TACHOMETER

This easy-to-use hand-held digital tachometer measures up to 99,999 RPM and features a large 5 digit LCD, laser pointer, low battery indicator, and memory recall for the last displayed value, minimum value, and maximum value. It also features a DC socket for mains power (5VDC at 50mA). It can also be switched to measure either actual RPM or total revolutions. Supplied with carry case and 600mm reflective tape marks.



SPECIFICATIONS	QM-1448
Display	2000 count
Test Range	2.5 to 99,999 RPM
Basic DC Accuracy	0.5%
Sampling	0.5 sec (over 120RPM)
Range Select	Autoranging
Detection Distance	50 to 500mm
Power Consumption	50mA approx.
Batteries	4 x AA batteries (included)
Dimensions	160(H) x 72(W) x 37(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
QM-1448	\$79.95	\$71.95	\$63.95

### OBD2 ENGINE CODE READER

Modern car engines are controlled by computers which regulate engine performance. Sensors are connected to major components which constantly send data to the computer which then adjusts performance accordingly to ensure minimal emissions and optimal performance. Reading data from these computers helps mechanics pinpoint where problems may lie in car performance. You can also find out this information with this OBD2 engine code reader. It connects to your OBD2 port and will immediately interpret the information in the ECU (engine control unit). You can use this information to find faulty sensors which adversely affect performance, see if cylinders are misfiring, see how hot your engine coolant is, view engine RPMs and much more. Diagnosing and fixing certain problems yourself can save a lot of time and money. It's also fascinating to see how much engine information is readily available in modern cars. Viewable parameters\*



- Vehicle Speed
- RPM
- Fuel Consumption
- Engine Coolant Temp
- Fuel Pressure



CAT.	Qty 1+	Qty 2+	Qty 4+
PP-2145	\$69.95	\$62.95	\$55.95

### COMPACT TYRE PRESSURE GAUGE

Tyre wear is exaggerated when your tyre pressure isn't kept at the manufacturers recommendations. Now you can check your tyre pressure before you set off with confidence. Simply push onto the valve, press the button, and presto! Your pressure is displayed on the screen. It couldn't be easier!



- Air Pressure Units: psi, bar, kPa, kgf/cm<sup>2</sup>
- Battery: 1 x LR44 Button Cell (Included)
- Dimensions: 42(W) x 98(H) x 26(D)mm, 48g



CAT.	Qty 1+	Qty 3+	Qty 6+
QP-2285	\$14.95	\$13.45	\$11.95

### TYRE PRESSURE GAUGE WITH DEFLATION MONITORING

Keeping your tyre pressure in check is important for maximising the life of your expensive tyres. But if you're travelling on sand or muddy terrain, or 4WDing in general, you often want to reduce pressure in the tyres to maximise your overall footprint and stability. Sure, you can grab a stick and manually deflate the tyres, but who wants to do that! Use this gauge and it will show current pressure while it deflates, so you can stop at any time! Also helps prevent over-deflation of tyres! Also features a bright LCD and LED torch to help you see what you're doing.

- Measurement Range: 5-100psi
- Units of Measurement: psi, bar, kPa
- Batteries: 2 x CR2032 Button Batteries (Included)
- Dimensions: 33(W) x 150(H) x 36(D)mm, 81g



CAT.	Qty 1+	Qty 3+	Qty 6+
QP-2287	\$29.95	\$26.95	\$23.95

## CIRCUIT TESTER

### NON-CONTACT AC VOLTAGE PROXIMITY DETECTOR

About the size of a marking pen, this non-contact tester detects AC voltages from 200-1000V. Featuring red and green indicators, the unit will glow green when safe, and when voltage is detected it will flash red and beep at an increasing rate as you get closer to the voltage source. It can be used for detecting live mains in outlets, power boards or insulated wiring. It also has an LED torch and a handy pocket clip.

- Auto Power Off
- Flashlight function
- CAT III rated
- Green and Red LED indicators
- Switchable audible and silent mode
- Includes 2 x AAA batteries
- Dimensions: 176(L) x 26(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
QP-2268	\$24.95	\$22.45	\$19.95

### 3-30VDC TESTER WITH VOLTAGE/POLARITY READOUT

Provides useful debugging and testing in many systems, most notably vehicles, boats, motorbikes, and other 6-24V systems. It provides an accurate voltage readout as well as polarity check. It's a more advanced version of a test-lamp used for decades in the automotive industry. Self powered from the test circuit.

- Tests powered-on circuits
- Works on 6V, 12V, and 24V systems
- Stainless steel testing probe



SPECIFICATIONS	QP-2216
Working Voltage Range	3V-30V (±0.3V Accuracy)
Operating Current	12VDC < 70mA
Dimensions	228(H) x 30(Dia.)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QP-2216	\$19.95	\$17.95	\$15.95

## INSPECTION CAMERAS

### INSPECTION CAMERA WITH 2.4" LCD

With a camera diameter of only 9mm, detailed inspection of some very tight spots is possible. Its comfortable grip and forward facing controls make it easy to detect and diagnose the inaccessible. 9mm camera head for up-close visual inspections in tight spaces. Requires 4 x AA batteries.

- Forward facing controls
- Adjustable brightness LED illuminator
- Adjustable LCD brightness



SPECIFICATIONS	QC-8710	1 YEAR WARRANTY
Sensor	CMOS	
Display	2.4" colour LCD	
Resolution	480 x 234 pixels	
Reach	1m	
Attachments	Mirror, hook & pick-up magnet	

	CAT.	Qty 1+	Qty 2+	Qty 4+
Inspection Camera	QC-8710	\$149.00	\$133.95	\$118.95
Extension Shaft 2m	QC-8702	\$79.95	\$71.95	\$67.95

### USB MINI INSPECTION CAMERA WITH 1.5M FLEXIBLE CABLE

Inspect areas your head or hands simply can't fit into and your limited humans eyes can't see. Ideal for finding dropped screws/bolts, seeing inside car engine bays, checking inside pipes, under grates, up rangehoods, in ceilings, and much more. This unit comes with three brilliant add-ons, a hook, a magnet, and a 45 degree mirror that can be attached to the end of the camera to help you retrieve those important bits. There are 4 white LEDs at the front of the camera that can have their brightness adjusted with a dial fused onto the cable. With the supplied software you can also capture video and images for playback at a later date. Requires no batteries, just connect to your laptop and start viewing

- Water resistant camera head and cable
- 4 White LED Lights (brightness adjustable)
- Compatible with Windows XP, Vista, 7, 8 & 10



SPECIFICATIONS	QC-3373
Flexible Cable Neck Diameter	5mm
USB Cable	USB2.0
Camera Head Outer Diameter	10mm
Resolution	640x480
Lens View Angle	54°
Focal Distance	6cm-infinite
Frame Rate	up to 30fps @ 640x480
Length	1.5m

	CAT.	Qty 1+	Qty 2+	Qty 4+
1.5m	QC-3373	\$44.95	\$40.45	\$37.95



To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

### INSPECTION CAMERA WITH RECORD & DETACHABLE WIRELESS SCREEN

With a 9mm diameter and four LEDs, the head of this inspection camera can capture video and pictures in confined and dark locations. The head and flexible boom being IP67 rated enables them both to be submerged in water during operation (however the base unit and LCD cannot get wet! Caution!). Included is a 2GB microSD card on which video and pictures can be recorded. These files can then be viewed on a TV with the included Video out cable or saved onto a PC via the USB cable included. The 3.5" LCD is detachable from the handle, which receives a wireless transmission from the camera. This enables more flexibility during operation, i.e. you can hold and manoeuvre the camera with one hand whilst keeping the LCD in full view in the other hand all the time. It makes operation easier.

- 2GB microSD card included (accepts up to 16GB)
- IP67 rated camera and flexible boom
- 4 white LEDs
- Three useful accessories: hook, mirror, magnet
- Strong plastic carry case
- 4 x AA batteries required for camera handle
- USB cable included
- Video out cable included
- Power supply 5VDC 1A included



DIMENSIONS	QC-8712
Monitor	100 x 70 x 25mm
Camera Diameter	9mm
Camera Handle	86 x 145 x 41mm
Flexible Boom	1m

SPECIFICATIONS	QC-8712	1 YEAR WARRANTY
Photo & Video Resolution	640 x 480	
Video Memory Usage Approx.	27MB/min - With 2GB microSD card approx.	
Photo Memory Usage Approx.	75kB - With 2GB microSD card approx.	
LCD	3.5"	
Wireless Frequency	2.4GHz	WARRANTY
Lithium-Ion Battery In LCD	3hour Charge, 2 hour usage.	

	CAT.	Qty 1+	Qty 2+	Qty 4+
Inspection Camera	QC-8712	\$299.00	\$269.00	\$239.00
Extension Shaft 2m	QC-8702	\$79.95	\$71.95	\$67.95

## ENVIRONMENT SENSORS

### PLUG-IN UV SENSOR FOR SMARTPHONES WITH APP

Turn your Smartphone into a pocket UV meter. Returns the UV index and power. Set the UV Index alarm to remind you to put on some sun block. It simply plugs into the Smartphone's earphone socket to measure UV index. By using a free downloadable APP for your iOS® and Android® device, you can see real time measurements or trigger an alarm when a pre determined measurement is reached. Intended for domestic use and readings, should only be used as a guide.

Note: Colours may vary to ones shown.



SPECIFICATIONS	QM-1677	1 YEAR WARRANTY
Measurements	UV (Ultraviolet)	
Range	240 - 380nm	
Deects	UVA, UVB	
UVI (UV Index) Range	0 - 12	
UV Power	0 - 6mW/cm2	
Measurement Error	± 10%	
Workable Temperature	-20 - 50°C	
Workable Humidity	< 80%	
Sensor Type	Semiconductor sensor	
Dimensions	30(L) x 10(Dia.)mm, 6g	

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-1677	\$34.95	\$31.45	\$27.90



## DISTANCE METER

### MINI LASER DISTANCE METER - 20M

A laser distance meter makes light work of taking area measurements. No longer do you have to get a second pair of hands on the other end of a tape measure, while you find some eye-protection for the inevitable recoil when you're done! Providing measurements up to 20m, with an accuracy of just 1.5mm - that's probably less than the flex in the end-hook of a tape measure anyway! Resolution down to 1mm, it also provides the last 20 measurements. Works in metric or imperial measurements, and can even help you with your area and volume calculations! The weatherproof case helps you work in just about all conditions too.

- Up to 20m range
- Metric and imperial
- Area volume calculations
- Weatherproof IP54 case

SPECIFICATIONS	QM-1626
Batteries	2 x AAA (included)
Range	0.05 to 20m
Accuracy	1.5mm
Resolution	1mm
History	20 Measurements
Units	m, in, ft
Laser Class	Class II 650nm, <1mW
IP Rating	IP54
Operating Temperature	-10° - 50°C
Battery Life	Up to 5000 Measurements
Weight	64g (excluding batteries)
Dimensions	37(W) x 100(H) x 24(D)mm



CAT.	Qty 1+	Qty 3+	Qty 4+
QM-1626	\$69.95	\$62.95	\$55.95

## STUD DETECTOR

### 3 IN 1 STUD DETECTOR WITH LASER LEVEL

A stud detector which just doesn't "beep" when you're over the stud, it shows the proximity when you are NEAR a stud via the large LCD and shows a target graphic when you're spot on. Also includes live wire (voltage) detection, you can be sure than nail you're about to hammer into the wall won't end up in your mains wiring. The best feature of all is the built in laser level. Rotating across 180 degrees with stops on 45 and 90°, you can instantly and easily do layouts and basic tasks such as picture levelling in a snap. The inbuilt spirit level ensures you're at the right angle.

- Laser levelling, layout and stud locating on vertical and horizontal surfaces
- Wood, metal and live wire detection
- 180° pivoting laser plane with level and plumb vials
- 20° laser line projections onto work surface with 90° squaring
- Two self contained half pins to mount unit to work surface
- LCD sensing and mode display with target graphics
- LED display with continuous live wire detection
- Thumb dial adjustable feet for levelling the laser
- Easy keypad operations and comfortable grip
- Powered by 9V Battery (included)
- Dimensions: 180(H) x 67(W) x 38(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
QP-2288	\$59.95	\$53.95	\$47.95

## VERNIER CALIPERS

### BUDGET 150MM DIGITAL VERNIER CALIPERS

This carbon composite digital caliper is ideal for general use and situations where the cost of our precision stainless steel tool isn't justified. The digital display is calibrated in imperial and metric units with a corresponding vernier scale etched onto the caliper slide. While we wouldn't recommend you use this caliper to build the Space Shuttle, it's perfectly suited to the home handyperson who finds traditional calipers hard to read.

- 150mm measurement range
- 0.1mm resolution
- 8.3mm LCD character height
- 245mm Overall length (closed)
- Internal and external jaws
- Includes battery



	CAT.	Qty 1+	Qty 3+	Qty 6+
Budget 150mm Digital Vernier Calipers	TD-2081	\$13.95	\$12.35	\$11.15

## WEIGHING SCALES

### 100G MINI-POCKET SCALE

Truly pocket-size scales. Ideal for laboratory, diets, clinical, jewellery or lapidary work. They'll measure up to 100 grams with excellent resolution and weight in grams, carats, pennyweight or ounces. 1 x CR2032 battery included.

- 60 second auto power-off
- Tare function
- 0.01g resolution
- Dimensions: 72(L) x 40(W) x 10(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
100g Mini-Pocket Scale	QM-7258	\$49.95	\$44.90	\$39.90

### 200G MINI-SCALE WITH BACKLIGHT

Extremely accurate mini scale suitable for a variety of applications. The large LCD is backlit and a 200g calibration weight is included. Resolution is 0.01g and it weighs in grams, carats, ounces and pennyweight.

- 2 x AAA batteries included
- Dimensions: 93(L) x 52(W) x 20(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
200g Mini-Scale with Backlight	QM-7259	\$69.95	\$62.95	\$55.95

### 1KG DIGITAL BENCH SCALE

Precision 1kg electronic scale with resolution of 0.01g for when a high degree of accuracy is required. Weighs in grams, ounces, pounds, grains, carats, troy ounces and also supplied with a wind shield and a built-in bubble level to provide maximum accuracy. Particularly suited to calculating quantities as it counts pieces by weight. Powered by 4 x AA batteries (not included) or mains adaptor. Suitable for kitchen, lapidary, jewellery, reloading etc.

- Auto power-off after 60 seconds
- Automatic calibration
- Backlit LCD
- Tare and counting function
- Mains powered
- Dimensions: 175(W) x 75(H) x 260(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
1kg Digital Bench Scale	QM-7264	\$179.00	\$160.95	\$142.95

### COMPACT DIGITAL LUGGAGE SCALE 50KG

Provides measurement in grams and kilograms, as well as pounds and ounces. Bright display with clear numbers and blue-backlight. Battery included.

- Up to 50kg
- kg/g and lb/oz
- Blue backlight



	CAT.	Qty 1+	Qty 3+	Qty 6+
Compact Digital Luggage Scale 50kg	QM-7234	\$19.95	\$17.95	\$15.95

### 150MM DIGITAL VERNIER CALIPERS

This precision instrument is made out of surgical grade stainless steel. It features a 5 digit LCD and will show readings in metric - 3 significant figures plus 2 decimal and in imperial - 2 significant figures and would you believe 3.5 decimal. (The fourth figure is either 0 or 5). The caliper can be zeroed at any point on the scale. Supplied with a sturdy clip-lock case with foam retainer and provision for spare battery.

- 0 - 150mm (0-6") range
- Resolution 0.01mm / 0.0005" (repeatability same)
- LR-44 battery powered (supplied)
- Battery life 12 months nominal
- Auto power off
- Thumbscrew slide damper
- Converts millimeters to inches and vice versa



	CAT.	Qty 1+	Qty 3+	Qty 6+
150mm Digital Vernier Calipers	TD-2082	\$39.95	\$35.90	\$31.90



## PANEL METERS

### 3.5 DIGIT LCD PANEL METERS

Common Specifications for QP-5570, QP-5580 & QP-5585

- Polarity: Automatic (-) for negative value
- Input: Analogue
- Zeroing: Automatic
- Operating temp: Standard 0 to 50°C
- Configuration: True differential input & reference
- Decimal point: User selectable
- Full scale range: 200mV
- Impedance: 10MΩ
- Conversion rate: 2.5 per second

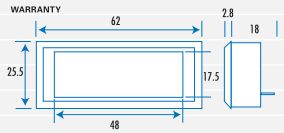
#### LCD PANEL METER

- Attractive modern bezel
- Snap retaining into panel
- Shallow depth
- 0.1" launcher connections



#### SPECIFICATIONS QP-5570

Type Of Display	LCD
Digits	3 1/2 digits (1999) 12.7mm figure height
Power	5V powered
Over Range	Display flashes "1"
Accuracy	±(0.1%rdg.+1dgt.)
Connection	13 pins
Dimensions	62(W) x 25(H) x 15(D)mm
Panel Cutout	60.5(W) x 24(H)mm



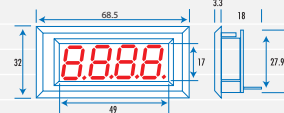
#### LED PANEL METER

- Surface mount construction for reliability
- 0.1" launcher connections
- Brightness matched superbright LEDs
- Attractive bezel with mounting clips
- 5V powered, TTL compatible common ground



#### SPECIFICATIONS QP-5580

Type Of Display	LED, red super bright
Digits	3 1/2 digits (1999) 14.2mm figure height
Power	5V powered, common ground
Over Range	Display blinks
Accuracy	±(0.1%rdg.+2dgt.)
Connection	10 pins
Dimensions	68.5(W) x 33(H) x 16(D)mm
Panel Cutout	64(W) x 28(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
LCD Panel Meter	QP-5570	\$27.95	\$24.95	\$22.35
LED Panel Meter	QP-5580	\$29.95	\$26.95	\$23.95

### ADD ON BOARD FOR QP-5570/80

This add on board makes it easy to set the range and decimal point on our QP-5570 or 80 panel meters. The ranges can be permanently set with a solder bridge or wired to a switch for selectable ranges.

- No 200mV range on QP-5580
- Cannot be used in applications where voltage to be measured also powers DPM



	CAT.	Qty 1+	Qty 5+	Qty 10+
Add On Board For QP-5570/80	QP-5575	\$9.95	\$8.75	\$7.75



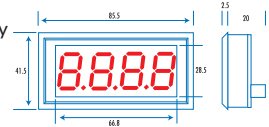
### Smart Hardware Competition:

- RODGER BEAN, SHOPS AT JAYCAR Fyshwick

"This is a mains switching unit for controlling studio "On Air" warning signs for a community radio station. This was a rebuild of what was a poorly constructed unit."

### 3.5 DIGIT JUMBO LED PANEL METER

This is not just a digital display, but a fully functional high impedance digital panel meter that only requires power to operate. It will measure voltages from 200mV to 500VDC (jumper selectable) and has a maximum count of 1999. The module is suitable for a host of applications and can be used as a voltmeter or adapted for use as a current meter, thermometer etc. The decimal point location can be selected with a jumper and the module uses an easy "plug-in" fixing method. The meter shares a common ground with the voltage being measured.



#### SPECIFICATIONS

Type Of Display	LED
Digits	3.5 Digits (1999) 20.3mm figure height
Power	5VDC, common ground, 60mA typical
Over Range	"1" shown on display
Accuracy	±0.5%
Dimensions	85(W) x 42(H) 25(D)mm
Panel Cutout Size	84(W) x 41(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
3.5 Digit Jumbo LED Panel Meter	QP-5585	\$34.95	\$31.45	\$27.90

### SELF-POWERED LED PANEL METERS 4.5-30VDC

Super simple to install, simply connect the power you want to monitor! Some panel meters require a power source in addition to a sensor wire to the source you want to monitor. These units connect straight up, with no fuss! Suitable for use between 4.5V and 30VDC, they're suitable for many DC applications including cars, boats, caravans, and other 12-24V sources. However their wide measurement range means they can be applied to many other applications too! Red coloured display. Panel mount with self-retaining spring clips.

- 4.5-30VDC input
- Simple two-wire installation



#### SPECIFICATIONS

Input	4.5-30VDC
Accuracy	1%
Refresh Speed	300ms
Working Current	<23mA
Weight	16g
Dimensions	48(W) x 29(H) x 22(D)mm
Panel Cutout Size	45(L) x 26(W)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
Voltmeter	QP-5581	\$14.95	\$13.45	\$11.95

### SELF-POWERED LED PANEL AMMETERS

Simple and easy to install self-powered ammeter for current display. It has 4-wire connection with an included current shunt. Auto zero calibration and easy to read red LED display. Give your next project a truly professional look. Perfect for automotive, caravan or 4WD use.

- Cutout size 42 x 23mm
- Easy installation
- Reverse Polarity protection
- Auto zero calibration
- Self powered



#### SPECIFICATIONS

Power Requirements	8 - 30VDC
Measurement Range	0 - 50ADC
Maximum Display Count	1999
Sample Frequency	400mS

Current shunt included.

Note! When connecting the ammeter QP-5588 it is essential that the wiring instructions provided with the product are followed, or the meter may be destroyed.

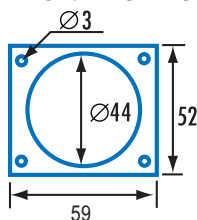
	CAT.	Qty 1+	Qty 5+	Qty 10+
Ammeter	QP-5588	\$39.95	\$35.90	\$31.90



## PANEL METERS - MU45

### PANEL METERS STYLE MU45 - MOVING COIL TYPE

- Overall Dimensions: 59(W) x 52(H)mm
- 44mm meter hole
- MU45
- Class 2.5



QP-5013



QP-5016

CAT.	COIL RESISTANCE	SCALE
QP-5010	200 $\Omega$	0-1mA
QP-5012	3,000 $\Omega$	0-50 $\mu$ A
QP-5013	0.05 $\Omega$	0-1A
QP-5014	0.01 $\Omega$	0-5A
QP-5015	0.005 $\Omega$	0-10A
QP-5016	0.003 $\Omega$	0-20A
QP-5020	20,000 $\Omega$	0-20V
QP-5022	30,000 $\Omega$	0-30V

CAT.	Qty 1+	Qty 3+	Qty 6+
Any of the above	\$17.95	\$15.95	\$14.35

## HEAVY DUTY CURRENT SHUNTS

### HEAVY DUTY CURRENT SHUNTS

Placed in series with a high power circuit, these shunt bars allow you to measure high current draw without needing a high current ammeter. Heavy duty brass construction and hand calibrated, they include large terminals for connection of the main circuit cables and smaller terminals for connection to a meter. Suitable for use with a standard multimeter or panel meter you simply measure the millivolts across the shunt to display the current draw of the circuit. Models are compatible with many readily available power meters such as our MS-6172 Digital DC Power Meter.

NOTE: Care must be taken when using current shunts to measure DC circuits with common powered meters. Incorrect connection can cause a short circuit between the measuring terminal and the display power resulting in damage to the voltmeter. To avoid this issue the current shunt should be connected in series between the load and the power supply negative. Please see our website for more information.

QP-5412



QP-5415



Diagram on web.

MANUFACTURERS: WE HAVE A SHUNT SUPPLIER WHO IS IMPOSSIBLE TO BEAT FOR PRICES AND QUALITY. WE CAN SUPPLY CUSTOM SHUNTS IN QUANTITIES AS LITTLE AS 100 PIECES. CONTACT OUR WHOLESALE SUPPLIER FOR DETAILS.

CAT	MAX CURRENT	VOLTAGE AT MAX CURRENT	SHUNT RESISTANCE	ACCURACY
QP-5410	5A	50mV	10milliOhm	0.5%
QP-5412	50A	50mV	1milliOhm	0.5%
QP-5415	100A	50mV	0.5mOhm	0.5%
QP-5417	200A	50mV	0.25mOhm	0.5%



MAX CURRENT	VOLTAGE AT MAX CURRENT	CAT.	Qty 1+	Qty 5+	Qty 10+
5A	50mV	QP-5410	\$12.95	\$11.35	\$10.35
50A	50mV	QP-5412	\$12.95	\$11.35	\$10.35
100A	50mV	QP-5415	\$19.95	\$17.70	\$15.70
200A	50mV	QP-5417	\$19.95	\$17.70	\$15.70

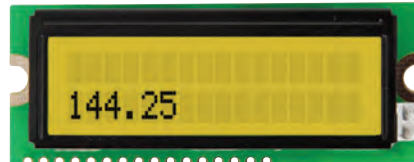
## Tech Talk: How To Install A Shunt

- Voltmeter is on millivolt scale
- Voltmeter connections to shunt are on each side of shunt
- If current is DC observe polarity. If AC amps connect either way
- Specs of shunt generally stamped on the shunt itself ie. 50mV/50A (volt drop across shunt) equates to 5, 10, 20A max current, etc. i.e. A 25mV reading on the millivolt meter would equate to 25A current on a 50A/50mV shunt. You can read the current straight off the millivolt scale on the meter.

## LCD MODULES

### LCD PANEL 2 LINE 16 CHARACTER COMPACT WITH BACKLIGHT & SIL CONNECTIONS

This compact LCD module has 96 inbuilt ASCII characters as well as 92 special letters and 8 custom characters, which can be displayed on a 16 character by 2 line screen. It will hold the current input on the display using its own built in memory, making it easy to drive. Connections via single in line solder pads with an independent backlight.



SPECIFICATIONS	QP-5512
Type	2 line LCD
Characters	16 x 2 lines
Character Size	4.89 x 2.78mm
Viewing Angle - Vertical	Sym 0 condition: CR>=2°, Min -10° Max 40°
Viewing Angle - Horizontal	Sym 0 condition: CR>=2°, Min -30° Max 30°
Supply Voltage For Logic	5VDC
Other Mechanical Data	Power supply current: 2mA, Duty: 1/16
Module Dimensions	66(W) x 26(H) x 12(D)mm
Viewing Display Area	51(W) x 14.8(H)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
Backlight	QP-5512	\$14.95	\$13.45	\$11.95

### DOT MATRIX LCD MODULES - ALPHANUMERIC

Compact Liquid Crystal Diode module with ASCII (96 characters), Special Letters (92 characters) and Custom Letters (8 characters). A two line screen displays up to 16 characters at a time and the module will hold the current display in its own inbuilt memory.



SPECIFICATIONS	QP-5515 / QP-5516
Type	Alphanumeric, 2 line LCD
Characters	16 x 2 lines
Character Size	4.89 x 2.78mm
Viewing Angle - Vertical	Sym 0 condition: CR>=2°, Min -10° Max 40°
Viewing Angle - Horizontal	Sym 0 condition: CR>=2°, Min -30° Max 30°
Supply Voltage For Logic	SYN: VDD - VSS Min 4.5V Typ 5V Max 5.5V
Other Mechanical Data	STN, yellow green, 1/16 duty, 6 o'clock
Module Dimensions	85(W) x 30(H) x 13.2(D)mm
Viewing Display Area	65(W) x 16(H)mm

	CAT.	Qty 1+	Qty 10+	Qty 25+
Without Backlight	QP-5515	\$12.95	\$11.45	\$8.95
With Backlight	QP-5516	\$19.95	\$17.95	\$13.95

### DOT MATRIX WHITE ON BLUE LCD

A HD44780 compatible character LCD display which features white backlit text on a blue background for great readability in all conditions. It features two lines of 16 characters, and is the same module as used in our XC-4454 Arduino LCD Shield. Suits XC-3706 I2C Port expander.

- 0.1" SIL connector for easy breadboarding/prototyping
- Can be controlled with 6 GPIO pins
- Nominal 5V supply with max 4.5mA operating current (excluding backlight)
- Separate backlight and contrast connections
- HD-44780 compatible for use with many microcontrollers including Arduino
- 4 x Mounting holes

Note: Simulated displays.



QP-5521



QP-5522

	CAT.	Qty 1+	Qty 10+	Qty 25+
16 x 2 Character	QP-5521	\$19.95	\$17.95	\$13.95
20 x 4 Character	QP-5522	\$24.95	\$22.45	\$17.45





# Security & Surveillance



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## WIRELESS DIGITAL DVR & CAMERA KITS

### SWANN 1080P BATTERY POWERED WI-FI CAMERA

A completely wire-free camera that you can place around the house or office to watch live or recorded video remotely all you need is Smartphone and Wi-Fi connection. The camera is rechargeable via USB and has versatile mounting options for temporary or permanent mounting. The camera protects you day and night with powerful 10m night vision, crisp Full HD 1080p video and a super wide 120° viewing angle. Use it indoors or outdoors thanks to the IP65 weatherproof rating and the built-in microphone will capture audio to add that extra layer of evidence to your video footage. To preserve battery life and to capture relevant footage, the built-in PIR heat-sensing sensor triggers recordings only when it senses people, large pets or cars up to 8m away. The camera's internal memory saves up to 7 days (hundreds) of 10-60 second video clips plus 2 days of free cloud storage.

- Free Android & iOS® Smartphone app
- Rechargeable lithium battery
- 7 day local & cloud storage
- True Detect™ PIR motion sensing technology
- In-built audio
- Lifetime 24/7 Swann support

#### Box Contents:

- 1 x 1080p battery powered Wi-Fi camera
- 1 x Magnetic stand mount
- 1 x USB charging cable
- 1 x Inside CCTV security sticker
- 2 x Outside CCTV security stickers
- 1 x 3M mounting tape
- 1 x Mounting hardware



	CAT.	Qty 1+
1080p Wi-Fi Camera	QV-9060	\$269.00
Twin Pack 1080p Wi-Fi Camera	QV-9062	\$499.00
Triple Pack 1080p Wi-Fi Camera	QV-9066	\$739.00
Quad Pack 1080p Wi-Fi Camera	QV-9068	\$969.00
ACCESSORIES	CAT.	Qty 1+
Secure Mount NEW	QV-9063	\$19.95
Magnet Stand	QV-9065	\$19.95
Solar Panel	QV-9067	\$99.95

#### SPECIFICATIONS

Resolution	1080p (1920 x 1080)
Frame Rate	25fps
Video Compression	H.264
Lens Angle	120°
Wi-Fi Frequency	2.4GHz & 5GHz
Infrared Range	Up to 10m
IP Rating	IP65
Battery	Li-ion 3.7V, 6000mAh
Dimensions	87(H) x 61(D) x 58(W)mm

### UNIDEN 1080P BATTERY POWERED WI-FI CAMERA

The Uniden App Cam Solo is a full HD, weatherproof smart camera. Completely wire-free, the app cam is battery powered with advanced power-saving technology featuring up to 180 days standby time. With quick and easy installation, the camera can be placed anywhere inside or outside of the home.

Offering a 130-degree viewing angle, which provides a greater field of vision, the Guardian App Cam Solo can be fitted to any flat surface with an easy-to-install magnetic base. Also included is an optional screw base for those more easy-to-reach areas, such as the front door. Cameras can be twisted to an angle to suit any situation and easily moved around the home without the need to re-wire or place near a power source, providing complete flexibility when setting up viewing angles.

- Wireless, quick & easy setup
- Free Android & iOS® smartphone app
- Instant alerts via app, email
- Battery powered
- Record to microSD
- Motion detection record
- Two way audio

#### Box Contents:

- 1 x 1080p battery powered Wi-Fi camera
- 1 x Magnetic stand mount
- 1 x Screw mount
- 4 x Lithium CR123A batteries
- 1 x Case opening tool
- 1 x Reset tool
- 1 x Screw kit



	CAT.	Qty 1+
Single Camera	QV-9800	\$229.00
2 Pack	QV-9802	\$449.00
4 Pack	QV-9804	\$849.00

#### SPECIFICATIONS

Resolution	1080p (1920 x 1080)
Frame Rate	15fps
Video Compression	H.264
Lens Angle	130°
Storage	microSD
Wi-Fi Frequency	2.4GHz
Infrared Range	Up to 10m
IP Rating	IP65
Battery	4 x Lithium CR123A
Dimensions	92(H) x 50(D) x 56(W)mm



## WIRELESS DIGITAL DVR & CAMERA KITS (CONTINUED)

### 720P AHD WIRELESS RECEIVER & CAMERA KIT

This is a universal AHD wireless camera and receiver kit, enabling you to add a wireless camera to any existing 720p or 1080p AHD compatible DVR. Using digital 2.4GHz transmission, it allows up to 100m line of sight range. The addition of a wireless camera expands the versatility of your existing AHD compatible DVR, without the need for other upgrades. The camera itself is a weatherproof bullet camera with infrared LEDs, providing clear 720p video. Includes 2 x mains power adaptors and mounting hardware.



<b>RECEIVER</b>	<b>QC-8663</b>
<b>Frequency</b>	2.4GHz Digital
<b>Wireless Range</b>	Up to 100m
<b>Resolution</b>	720p (1280 x 720)
<b>Power</b>	9VDC, 600mA
<b>Dimensions</b>	80(L) x 55(W) x 15(H)mm
<b>CAMERA</b>	
<b>Resolution</b>	720p (1280 x 720)
<b>Frame Rate</b>	15fps
<b>Lens</b>	3.6mm
<b>Lens Angle</b>	70°
<b>Infrared</b>	24 x IR LEDs
<b>Infrared Range</b>	Up to 15m
<b>IP Rating</b>	IP66
<b>Power</b>	9VDC, 600mA
<b>Dimensions</b>	164(L) x 64(Dia.)mm (Including Bracket)

	CAT.	Qty 1+	Qty 2+	Qty 4+
720p AHD Wireless	QC-8663	\$279.00	\$249.00	\$229.00

### 4 CHANNEL 1080P WI-FI NVR KIT WITH 4 X 1080P CAMERAS

This network video recorder includes 4 x 1080p Wi-Fi day/night cameras that deliver exceptional picture quality without hardwired ethernet connections. With built-in infrared LEDs they will continue to capture objects in the dark while their weatherproof enclosure allows them to be installed outside. Real time remote viewing possible via PC, Smartphones (iPhone™ or Android) or tablets. With motion triggered recording you can catch potential intruders in the act or maybe the dog that raids your garbage bin at night. Easy footage backup to a USB drive.

- Up to 50m wireless range
- Free Android & iOS® Smartphone app
- Record & playback simultaneously
- Easy QR code setup
- Dropbox photo backup
- Motion detection, manual & scheduled recording
- Password protection
- Motion detection email & push notification alerts
- External USB backup
- Video loss alarm



<b>DVR</b>	<b>QV-3162</b>
<b>Wireless Range</b>	Up to 50m
<b>Outputs</b>	1 x HDMI (Video & Audio) 1 x VGA (Video)
<b>Resolution</b>	1080p (1920 x 1080) @ 15fps
<b>Display</b>	Single / Quad / Sequence
<b>Hard Drive</b>	1TB (Supports up to 6TB 3.5" SATA)
<b>Recording Time</b>	Up to 10 Days
<b>Power Supply</b>	12VDC, 2A
<b>Dimensions</b>	300(L) x 227(W) x 53(D)mm

	CAT.	Qty 1+	Qty 4+
1080p Wi-Fi NVR	QV-3162	\$799.00	\$719.00

### 4 CHANNEL WIRELESS 7" LCD DVR & CAMERA KITS

The large 7" touch screen LCD gives you full control, and you can even connect up to 4 cameras (1 camera included in kit, others available separately). There are two different resolution models available to suit your requirements too! Digital transmission up to 100m ensures a flexible, no-fuss installation. The monitor can be easily moved around thanks to the in-built rechargeable battery, which will power the unit for up to 2.5hrs at a time. Video is then easily recorded to an SD card (not included). The camera itself is a solid weatherproof outdoor camera with built-in LEDs for night vision, and a motion detector (PIR). This can be used to automatically trigger recording from motion detection, so reduce required memory and save review time when looking for events in the recordings. Of course all video is transmitted wirelessly, so you just need a power source nearby the camera. All power supplies are included, as well as mounting hardware for the camera.

- Quad viewing mode
- 2 way audio communication
- Record & playback simultaneously
- Motion detection, scheduled & manual recording



View live footage on a Smartphone (QC-3764 Only).  
Smartphone not included.

<b>MONITOR</b>	
<b>LCD</b>	7" Touch Screen
<b>Frequency</b>	2.4GHz Digital Wireless
<b>Range</b>	Up to 100m
<b>Resolution</b>	800 x 480 (VGA) Video
<b>Compression</b>	MPEG-4
<b>Recording Format</b>	ASF
<b>Storage</b>	Up to 128GB SD
<b>Battery</b>	3.7V, 2000mAh Li-ion
<b>Battery Time</b>	Up to 2.5hrs
<b>Power</b>	5VDC, 2A
<b>Dimensions</b>	196(L) x 123(H) x 20(D)mm

#### UP TO FOUR CAMERAS

<b>CAMERA</b>	<b>QC-3762</b>	<b>QC-3764</b>
<b>Image Sensor</b>	1/4" Colour CMOS	
<b>Resolution</b>	640 x 480 (VGA)	720p (1280 x 720)
<b>Frame Rate</b>	25fps (up to 2 cameras), 15fps (up to 4 cameras)	
<b>Lens</b>	3.6mm	
<b>Viewing Angle</b>	66°	
<b>Night Vision</b>	24 x IR LEDs	
<b>IP Rating</b>	IP65	
<b>Power</b>	9VDC, 600mA	
<b>Dimensions</b>	191(L) x 69(Dia.)	

	CAT.	Qty 1+	Qty 2+	Qty 4+
7" LCD + 1 x VGA Camera	QC-3762	\$299.00	\$269.00	\$249.00
Spare Camera to suit	QC-3763	\$159.00	\$142.95	\$134.95
	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 4+</b>	
720p 7" Touch Screen LCD + 1 x 720p Camera	QC-3764	\$399.00	\$359.00	
Spare Camera to suit	QC-3765	\$169.00	\$151.95	





## DVR & Camera Kits:

Since the introduction of Swann brand video surveillance equipment, our whole range has gone through a renaissance. The Swann equipment and our venerable range of in-house gear has culminated in the strongest and largest range of security and surveillance products in Australia and New Zealand. Yes, you can buy a small range of security cameras, etc. from a discount HiFi or hardware store. But why would you? The store staff generally know NOTHING about this eclectic area of technology. They know NOTHING about the significance of emerging technologies.

- Check out the new 4K UHD resolution products in DVR and NVR
- New wireless, long-life battery powered cameras with 1080p resolution. Ideal for people renting or leasing properties where hard wiring is not allowed. Wireless system popularity is exploding because there is simply no loss in performance any more

We here at Jaycar are acknowledged EXPERTS in Security and Surveillance products and this year it is no different. You would not get your family GP to remove your appendix, so why go to a mobile phone shop to get advice on a home security/surveillance system? Jaycar has been selling this gear for over 20 years and we know our stuff. You will pay no more at Jaycar but rest in assurance that the advice you get will be sound, along with the largest range of quality products available. We do not sell mobile phones.

- Whilst hardware is improving dramatically, related software "smarts" and apps are also developing at the same time. Ultimately making setup and usage easier.
- Value just keeps improving. Just look at our \$399, 720p 4 channel, 4 camera system, or \$599 for the 1080p 4 channel, 4 camera version, both on p269. That's \$50 cheaper than last year!



## Select Your Model: DVR KITS

Wired Systems	Channels	Cameras Supplied	Recorder Type	Recorder Resolution	Hard Drive	Camera TV Line	Camera Type	Page
QV-3135	4	4	DVR	720p	500GB	720p	AHD	269
QV-3164	4	4	DVR	1080p	1TB	1080p	AHD	269
QV-3166	8	4	DVR	1080p	1TB	1080p	AHD	269
QV-9005	8	6	DVR	1080p	1TB	1080p	TVI	270
QV-9030	8	6	DVR	3MP	2TB	3MP	TVI	270
QV-9051	8	4	DVR	4K	2TB	4K	TVI - Bullet	271
QV-9053	8	4	DVR	4K	2TB	4K	TVI - Dome	271
QV-9055	8	6	DVR	4K	2TB	4K	TVI	271
QV-9057	8	8	DVR	4K	2TB	4K	TVI	271
QV-9070	8	4	NVR	4K	2TB	5MP	IP-Bullet	272
QV-9072	8	4	NVR	4K	2TB	5MP	IP-Dome	272
QV-9074	8	6	NVR	4K	2TB	5MP	IP - Bullet/Dome	272
QV-9080	8	4	NVR	4K	2TB	4K	IP - Bullet	272
Wireless Systems	Channels	Cameras Supplied	Recorder Type	Recorder Resolution	Hard Drive	Camera TV Line	Camera Type	Page
QV-9060	1	1	WIFI/BATTERY	1080p	Internal/Cloud	1080p	WiFi	266
QV-9800	1	1	WIFI/BATTERY	1080p	SD Card	1080p	WiFi	266
QC-3762	4	1	DVR WIRELESS	VGA	SD Card	VGA	2.4GHz Digital	267
QC-3764	4	1	DVR WIRELESS	VGA	SD Card	720p	2.4GHz Digital	267
QV-3162	4	4	NVR-WIFI	1080p	1TB	1080p	IP-Bullet	267

## Tech Talk: DVR VS NVR

There are key differences between NVR and DVRs. NVRs may have a higher cost, however can provide an easier install and higher quality images.

### DVR (Digital Video Recorder):

- Uses coax cable to run video from the camera to the DVR
- 200m maximum camera maximum distance to DVR
- Each camera needs its own power source using a secondary cable between power supply and cameras using a splitter
- Cameras are analogue with the image processing done by the DVR. Cheaper camera cost.

### NVR (Network Video Recorder):

- Uses common Ethernet cables to run video and power between the camera and DVR
- 100m maximum camera distance to DVR, but can be extended using PoE enabled Ethernet Router or Switch
- Power is provided from the DVR over Ethernet (PoE). No extra cabling.
- Modern homes and offices already have Ethernet running between rooms, which makes installation easier
- Cameras are digital with the images processed in the camera. Higher camera cost.

## TECHview HD DVR & Camera Kits:

Complete with everything you need, a kit is the most cost-effective way to setup a new surveillance system.

Preinstalled with a high capacity hard drive (upgradable for even more storage), and includes a set of day and night cameras that deliver exceptional picture quality.

Each system allows you to add additional ONVIF IP cameras on the same network to expand the available channels. become a 6 channel DVR.

The cameras provide clear video in all conditions. With built-in infrared LEDs, they will continue to capture objects in the dark while their weatherproof enclosure allows them to be installed outside.

Setup or use your own personal Dropbox storage account to automatically save the photos from your footage. Dropbox offers 2GB of free storage or for users who require larger storage; a subscription service is available. This allows you to retrieve the images in case your DVR is stolen or damaged. Remote viewing is possible via PC software, internet browsers or smart phones and tablets. Recorded footage can be easily transported offsite via USB flash drive or be downloaded over a network.

### Features:

- Free Android & iOS® Smartphone app
- Add 2 additional IP cameras
- Record & playback simultaneously
- Easy QR code setup
- Dropbox photo backup
- Motion detection, manual & scheduled recording
- Password protection
- Motion detection email & push notification alerts
- External USB backup
- Video loss alarm

### Box Contents:

- 1 x DVR
- 4 x Cameras
- 4 x 18m video & power cables
- 1 x USB mouse
- 1 x Remote control
- 1 x 4 way power splitter
- 1 x Mains power adaptor
- 1 x Software CD



View live footage on a Smartphone.  
*Smartphone not included.*

### 4 CHANNEL 720P AHD DVR KIT WITH 4 X 720P CAMERAS

### 4 CHANNEL 1080P DVR KIT WITH 4 X 1080P CAMERAS

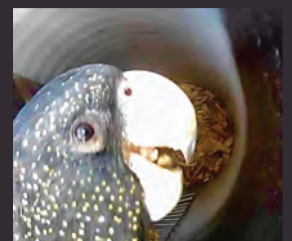
### 8 CHANNEL 1080P DVR KIT WITH 4 X 1080P CAMERAS

DVR	QV-3135	QV-3164	QV-3166
DVR Type	AHD/TVI/CVI/IP/CVBS (Analogue)	AHD/TVI/CVI/IP/CVBS (Analogue)	AHD/TVI/CVI/IP/CVBS (Analogue)
Channels	4 Analogue / 2 IP	4 Analogue / 2 IP	8 Analogue / 4 IP
Inputs	4 x BNC (Video) / 4 x RCA (Audio)	4 x BNC (Video) / 4 x RCA (Audio)	8 x BNC (Video) / 8 x RCA (Audio)
Outputs	1 x HDMI (Video & Audio) / 1 x VGA (Video) / 1 x RCA (Audio)	1 x HDMI (Video & Audio) / 1 x VGA (Video) / 1 x RCA (Audio)	1 x HDMI (Video & Audio) / 1 x VGA (Video) / 1 x RCA (Audio)
AHD Display / Record Resolution	1080N / 720p / 960H	1080p / 720p / 960H	1080p / 720p / 960H
IP Display / Record Resolution	1080p / 720p	4MP / 3MP / 1080p / 720p	4MP / 3MP / 1080p / 720p
Frame Rate	15fps (1080n/720p) / 25fps (960H)	25fps (Each Channel)	25fps (Each Channel)
Video Compression	H.264	H.264	H.264
Hard Drive	500GB (Included)	1TB (Included)	1TB (Included)
Hard Drive Capacity	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA
Recording Time	Up to 18 Days (960H x 4 Channels)	Up to 26 Days (960H x 4 Channels)	Up to 17 Days (960H x 8 Channels)
USB Interface	2 x USB 2.0 Ports (Mouse/Backup/Upgrade)	2 x USB 2.0 Ports (Mouse/Backup/Upgrade)	2 x USB 2.0 Ports (Mouse/Backup/Upgrade)
IP Cameras	Up to 2 x ONVIF 720p/1080p IP Cameras	Up to 2 x ONVIF 4MP IP Cameras	Up to 4 x ONVIF 4MP IP Cameras
Network Interface	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps
Dimensions	300(L) x 227(W) x 53(D)mm	300(L) x 227(W) x 53(D)mm	300(L) x 227(W) x 53(D)mm
<b>CAMERA</b>			
Resolution	720p (1280 x 720)	1080p (1920 x 1080)	1080p (1920 x 1080)
Lens Angle	92°	92°	92°
Infrared Range	Up to 15m	Up to 15m	Up to 15m
IP Rating	IP66	IP66	IP66
Dimensions	152(L) x 60(H) x 60(W)mm (Excl. Bracket)	165(L) x 75(Dia)mm (Excluding Bracket)	

	CAT.	Qty 1+	Qty 4+	
4 Channel 720p DVR Kit with 4 Cameras	QV-3135	\$399.00	\$359.00	
4 Channel 1080p DVR Kit with 4 Cameras	QV-3164	\$599.00	\$539.00	
8 Channel 1080p DVR Kit with 4 Cameras	QV-3166	\$699.00	\$629.00	
	CAT.	Qty 1+	Qty 2+	Qty 4+
720p Bullet Camera	QC-8637	\$99.95	\$89.95	\$84.95
720p Dome Camera	QC-8639	\$99.95	\$89.95	\$84.95
1080p Bullet Camera	QC-8685	\$129.00	\$115.95	\$108.95
1080p Dome Camera	QC-8687	\$129.00	\$115.95	\$108.95

### Smart Hardware Competition: - DARREN HAMLEY, SHOPS AT JAYCAR OCONNOR

"I built a surveillance system to research endangered Black Cockatoos. Using a security camera with motion detection, two Arduino voltage regulators, a 5 Watt Solar panel, solar controller and sealed lead acid battery I created a system that would never need to be recharged. The camera has been in place for 12 months and a female cockatoo settled into the artificial nest yesterday. The photograph is a screenshot looking down the nest, the weldmesh ladder can be seen going down to the base."



## Swann HD DVR & Camera Kits:

A cutting edge and easy to use surveillance system available in 1080p and 3MP high definition to see and protect your premises. All DVR kits feature True Detect™ PIR motion sensors on each camera, designed to reliably detect people, pets, cars and other heat generating objects.

### Features:

- True Detect™ PIR motion sensing technology
- Free Android & iOS® Smartphone app
- Record & playback simultaneously
- Easy QR code setup
- Motion detection, manual & scheduled recording
- Password protection
- Motion detection email & push notification alerts
- External USB backup
- Video loss alarm
- Lifetime 24/7 Swann support

### Box Contents:

- 1 x 8 channel DVR
- 6 x PIR bullet cameras
- 6 x 18m video & power cables
- 1 x USB mouse
- 1 x 1m ethernet cable
- 1 x HDMI cable
- 2 x 4 way power splitters
- 1 x Mains power adaptor
- 6 x CCTV security stickers
- 6 x Mounting hardware



QV-9030 Shown



WARRANTY



View live footage on a Smartphone.  
*Smartphone not included.*

### SWANN 8 CHANNEL 1080P DVR KIT WITH 6 X 1080P PIR CAMERAS

### SWANN 8 CHANNEL 3MP DVR KIT WITH 6 X 3MP PIR CAMERAS



DVR	QV-9005	QV-9030
Channels	8	8
Inputs	8 x BNC (Video) / 1 x RCA (Audio)	8 x BNC (Video) / 1 x RCA (Audio)
Outputs	1 x HDMI (Video & Audio) / 1 x VGA (Video) / 1 x RCA (Audio)	1 x HDMI (Video & Audio) / 1 x VGA (Video) / 1 x RCA (Audio)
Display Resolution	1080p (1920 x 1080)	3MP (2048 x 1536)
Recording Resolution	1080p (1920 x 1080)	3MP (2048 x 1536)
Frame Rate	25fps (Each Channel)	25fps (Each Channel)
Video Compression	H.264	H.264
Hard Drive	1TB (Included)	2TB (Included)
Hard Drive Capacity	Up to 4TB 3.5" SATA	Up to 6TB 3.5" SATA
Recording Time	Up to 365 Days (Motion Detection)	Up to 365 Days (Motion Detection)
USB Interface	3 x USB 2.0 Ports (Mouse/Backup/Upgrade)	3 x USB 2.0 Ports (Mouse/Backup/Upgrade)
Network Interface	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps
Dimensions	230(W) x 210(D) x 47(H)mm	275(W) x 220(D) x 53(H)mm
Camera		
Resolution	1080p (1920 x 1080)	3MP (2048 x 1536)
Lens Angle	102°	64°
Infrared Range	Up to 30m	Up to 30m
IP Rating	IP66	IP66
Dimensions	146(L) x 79(H) x 65(W)mm	151(L) x 70(H) x 70(W)mm

	CAT.	Qty 1+	Qty 4+
8 Channel 1080p DVR Kit with 6 x 1080p PIR Cameras	QV-9005	\$699.00	\$629.00
8 Channel 3MP DVR Kit with 6 x 3MP PIR Cameras	QV-9030	\$899.00	\$809.00

### Related Product:



1080P BULLET CAMERA



1080P DOME CAMERA



ADDITIONAL 3MP BULLET CAMERA



ADDITIONAL 3MP DOME CAMERA

CAT.	Qty 1+	Qty 4+
QV-9007	\$79.95	\$71.95

CAT.	Qty 1+	Qty 4+
QV-9009	\$79.95	\$71.95

CAT.	Qty 1+	Qty 4+
QV-9032	\$99.95	\$89.95

CAT.	Qty 1+	Qty 4+
QV-9034	\$99.95	\$89.95



## Swann Premium 4K DVR & PIR Camera Kits:



Get crystal clear images in 4K (8MP) Ultra HD, a massive 4 times more pixels than 1080p (2MP), allowing you to zoom in into important details such as faces and license plates. These DVR's all feature True Detect™ PIR motion sensors on each camera designed to reliably detect people, pets, cars and other heat generating objects.

View live or playback video in HD with outstanding clarity and enhanced digital zoom on your HDTV or monitor via HDMI or VGA. View 4 cameras in quad view, one at a time or add 2 more cameras (sold

separately) for 8 channel monitoring.

You also get remote login and access to push notifications via the free Apple® or Android Swann HomeSafe View App and can setup your system to take still images and save them to your personal Dropbox account in the cloud. So even if your security system gets stolen or destroyed by any burglars, you'll have peace of mind knowing you can go online and access snapshots from your security cameras.

### Features:

- True Detect™ PIR motion sensing technology
- Free Android & iOS® Smartphone app
- Record & playback simultaneously
- Easy QR code setup
- Motion detection, manual & scheduled recording
- Password protection
- Motion detection email & push notification alerts
- External USB backup
- Video loss alarm
- Lifetime 24/7 Swann support

### Box Contents:

- 8 channel 4K DVR
- PIR cameras
- 18m video & power cables
- USB mouse
- 1m ethernet cable
- HDMI cable
- 4 Way power splitter
- Mains power adaptor
- CCTV security stickers
- Mounting hardware



View live footage on a Smartphone.  
Smartphone not included.

### SWANN 8 CHANNEL 4K DVR KIT WITH 4 X 4K PIR BULLET CAMERAS

### SWANN 8 CHANNEL 4K DVR KIT WITH 4 X 4K PIR DOME CAMERAS

### SWANN 8 CHANNEL 4K DVR KIT WITH 6 X 4K PIR CAMERAS

### SWANN 8 CHANNEL 4K DVR KIT WITH 8 X 4K PIR BULLET CAMERAS

DVR	QV-9051	QV-9053	QV-9055	QV-9057
Channels	8	8	8	8
Inputs	8	8	8	8
Outputs	1	1	1	1
Display Resolution	4K (3840 x 2160)	4K (3840 x 2160)	4K (3840 x 2160)	4K (3840 x 2160)
Recording Resolution	4K (3840 x 2160)	4K (3840 x 2160)	4K (3840 x 2160)	4K (3840 x 2160)
Frame Rate	9fps (Each Channel)	9fps (Each Channel)	9fps (Each Channel)	9fps (Each Channel)
Video Compression	H.265	H.265	H.265	H.265
Hard Drive	2TB (Included)	2TB (Included)	2TB (Included)	2TB (Included)
Hard Drive Capacity	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA
Recording Time	Up to 365 Days (Motion Detection)	Up to 365 Days (Motion Detection)	Up to 365 Days (Motion Detection)	Up to 365 Days (Motion Detection)
USB Interface	1 x USB 3.0	1 x USB 3.0	1 x USB 3.0	1 x USB 3.0
Network Interface	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps
Dimensions	255(W) x 22 (D) x 50(H)mm	255(W) x 22 (D) x 50(H)mm	255(W) X 220(D) X 50(H)mm	255(W) X 220(D) X 50(H)mm
Camera				
Resolution	4K (3840 x 2160)	4K (3840 x 2160)	4K (3840 x 2160)	4K (3840 x 2160)
Lens Angle	80°	80°	80°	80°
Infrared Range	Up to 30m	Up to 30m	Up to 30m	Up to 30m
IP Rating	IP67	IP67	IP67	IP67
Dimensions	160(L) x 70(H) x 70(W)mm	82(H) x 111(Dia.)mm	160(L) x 70(H) x 70(W)mm	160(L) x 70(H) x 70(W)mm

	CAT.	Qty 1+	Qty 4+
8 Channel 4K DVR Kit with 4 x 4K PIR Bullet Cameras	QV-9051	\$1,299.00	\$1,169.00
8 Channel 4K DVR Kit with 4 x 4K PIR Dome Cameras	QV-9053	\$1,299.00	\$1,169.00
8 Channel 4K DVR Kit with 4 x PIR Bullet, 2 x PIR Dome Cameras	QV-9055	\$1,699.00	\$1,529.00
8 Channel 4K DVR Kit with 8 x 4K PIR Bullet Cameras	QV-9057	\$2,199.00	\$1,979.00

### Related Product:



### ADDITIONAL 4K BULLET CAMERA

CAT.	Qty 1+	Qty 4+
QV-9058	\$229.00	\$199.00



### ADDITIONAL 4K DOME CAMERA

CAT.	Qty 1+	Qty 4+
QV-9059	\$229.00	\$199.00

## NERD PERKS REWARDS CARD:

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\* Conditions apply.



## Swann Premium NVR & PIR Camera Kits:



Get amazing image definition with 5 Megapixel cameras, which is 2.4x better than 1080p Full HD (2MP). Zoom in closer with incredible clarity to license plates, facial features and clothing patterns. The 4 IP security cameras come with Ethernet cables and are weatherproof, built tough for the outdoors or indoors. Swann's True Detect™ PIR Thermal Sensing technology detects motion by heat, such as from people & cars, to trigger recording and push notifications. This virtually eliminates false triggers, like plants moving with the wind, to only capture events with security relevance. See in the dark up

to 40 metres with the camera's powerful infrared night vision. Enjoy easy camera installation with Power over Ethernet (PoE) as each camera is connected via Cat 5 network cable to transmit power, video and audio. Set up the security system to save video footage to your personal Dropbox, Google Drive or Microsoft OneDrive account in the cloud. Expand your CCTV system by adding up to 4 more cameras for a complete 8 channel home security system, suitable for medium-sized businesses & detached homes. You may even add 8-megapixel 4K cameras, which have 1.7 times more pixels than 5MP.



### Features:

- True Detect™ PIR motion sensing technology
- Free Android & iOS® Smartphone app
- Record & playback simultaneously
- Easy QR code setup
- Dropbox photo backup
- Power over ethernet (PoE)
- Motion detection, manual & scheduled recording
- Password protection
- External USB backup
- Lifetime 24/7 Swann support

### Box Contents:

- 8 channel 4K NVR
- PIR cameras
- 18m ethernet cables (cameras)
- USB mouse
- 1m ethernet cable (NVR)
- HDMI cable
- Mains power adaptor
- CCTV security stickers
- Mounting hardware



View live footage on a Smartphone.  
*Smartphone not included.*

### SWANN 8 CHANNEL 4K NVR KIT WITH 4 X 5MP PIR BULLET CAMERAS

### SWANN 8 CHANNEL 4K NVR KIT WITH 4 X 5MP PIR DOME CAMERAS

### SWANN 8 CHANNEL 4K NVR WITH 6 X 5MP PIR CAMERAS

### SWANN 8 CHANNEL 4K DVR KIT WITH 4 X 4K PIR BULLET CAMERAS

DVR	QV-9070	QV-9072	QV-9074	QV-9080
Channels	8	8	8	8
Inputs	8	8	8	8
Outputs	1	1	1	1
Display Resolution	4K (3840 x 2160)	4K (3840 x 2160) 5MP (2560 x 1960)	4K (3840 x 2160) 5MP (2560 x 1960)	4K (3840 x 2160)
Recording Resolution	4K (3840 x 2160)	4K (3840 x 2160) 5MP (2560 x 1960)	4K (3840 x 2160) 5MP (2560 x 1960)	4K (3840 x 2160)
Frame Rate	15fps (Each Channel)	15fps (Each Channel)	15fps (Each Channel)	15fps (Each Channel)
Video Compression	H.265/H.264	H.265/H.264	H.265/H.264	H.265/H.264
Hard Drive	2TB (Included)	2TB (Included)	2TB (Included)	2TB (Included)
Hard Drive Capacity	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA	Up to 6TB 3.5" SATA
Recording Time	Up to 365 Days	Up to 365 Days	Up to 365 Days	Up to 365 Days
USB Interface	3 x USB Ports (Mouse/Backup/Upgrade)	3 x USB Ports (Mouse/Backup/Upgrade)	3 x USB Ports (Mouse/Backup/Upgrade)	3 x USB Ports (Mouse/Backup/Upgrade)
Network Interface	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps	Ethernet, RJ45 10/100Mbps
Dimensions	310(W) x 235(D) x 53(H)mm	310(W) x 235(D) x 53(H)mm	310(W) x 235(D) x 53(H)mm	310(W) x 235(D) x 53(H)mm
Camera				
Resolution	5MP (2560 x 1960)	5MP (2560 x 1960)	5MP (2560 x 1960)	4K (3840 x 2160)
Lens Angle	82°	82°	82°	93°
Infrared Range	Up to 40m	Up to 40m	Up to 40m	Up to 40m
IP Rating	IP66	IP66	IP66	IP66
Dimensions	310(W) x 235(D) x 53(H)mm	100(H) x 100(Dia)mm	100(H) x 100(Dia)mm	151(L) x 70(Dia)mm

	CAT.	Qty 1+	Qty 4+
8 Channel 4K DVR Kit with 4 x 5MP PIR Bullet Cameras	QV-9070	\$1,199.00	\$1,079.00
8 Channel 4K DVR Kit with 4 x 5MP PIR Dome Cameras	QV-9072	\$1,199.00	\$1,079.00
8 Channel 4K DVR Kit with 4 x 5MP PIR Bullet and 2 x PIR Dome Cameras	QV-9074	\$1,499.00	\$1,349.00
8 Channel 4K DVR Kit with 4 x 4K PIR Cameras	QV-9080	\$1,699.00	\$1,529.00

### Related Product:



#### 5MP BULLET CAMERA

CAT.	Qty 1+	Qty 4+
QV-9076	\$189.00	\$169.95



#### 5MP DOME CAMERA

CAT.	Qty 1+	Qty 4+
QV-9078	\$189.00	\$169.95



#### 4K BULLET CAMERA

CAT.	Qty 1+	Qty 4+
QV-9082	\$249.00	\$219.00



#### 4K DOME CAMERA

CAT.	Qty 1+	Qty 4+
QV-9084	\$249.00	\$219.00

## TECHview AHD DVRs:

Standalone DVR's suitable for either home or office applications, supporting the latest HD analogue AHD, TVI and IP cameras, video resolutions up to 1080p and up to 16 channels for larger premises. These units can even support additional IP cameras (sold separately) if they're connected to the same network. (See individual model specifications below).

They support monitors with VGA or HDMI input, include up to 2TB HDD storage and feature an advanced user interface with user friendly design and intuitive user controls. The DVR's can connect to a wired network so you can see what is going on from anywhere in the world via your iOS™ or Android Smartphone or Tablet. Setup or use your own personal Dropbox storage account to automatically save the photos from your footage.

Includes a mains power adaptor, mouse and remote control.



View live footage on a Smartphone.

*Smartphone not included.*

### Features:

- Free Android & iOS® Smartphone app
- Add additional IP cameras
- Record & playback simultaneously
- Easy QR code setup
- Dropbox photo backup
- Motion detection, manual & scheduled recording
- Password protection
- Motion detection email & push notification alerts
- External USB backup
- Video loss alarm



DVR	QV-3161	QV-3157	QV-3159
<b>DVR Type</b>	AHD/TVI/CVI/IP/CVBS (Analogue)		
<b>Channels</b>	4 Analogue / 2 IP	8 Analogue / 4 IP	16 Analogue / 8 IP
<b>Inputs</b>	4 x BNC (Video) / 4 x RCA (Audio)	8 x BNC (Video) / 8 x RCA (Audio)	16 x BNC (Video) / 4 x RCA (Audio)
<b>Outputs</b>	1 x HDMI (Video & Audio) / 1 x VGA (Video) / 1 x RCA (Audio)		
<b>AHD Display / Record Resolution</b>	1080n / 720p / 960H	3MP / 1080p / 720p / 960H	
<b>IP Display / Record Resolution</b>	1080p / 720p	4MP / 3MP / 1080p / 720p	
<b>Frame Rate</b>	15fps (1080n/720p) / 25fps (960H)	7fps (3MP) / 25fps (1080p/720p/960H)	12fps (3MP) / 15fps (1080p) / 25fps (720p/960H)
<b>Video Compression</b>	H.264		
<b>Hard Drive</b>	500GB (Included)	1TB (Included)	2TB (Included)
<b>Hard Drive Capacity</b>	Up to 6TB 3.5" SATA		
<b>Recording Time</b>	Up to 18 Days (960H x 4 Channels)	Up to 17 Days (960H x 8 Channels)	Up to 8 Days (960H x 16 Channels)
<b>USB Interface</b>	1 x USB 3.0, 1 x USB 2.0 Ports (Mouse/Backup/Upgrade)		
<b>IP Cameras</b>	Up to 2 x ONVIF 720p/1080p IP Cameras	Up to 4 x ONVIF 4MP IP Cameras	Up to 8 x ONVIF 4MP IP Cameras
<b>Network Interface</b>	Ethernet, RJ45 10/100Mbps		
<b>Dimensions</b>	300(L) x 227(W) x 53(D)mm		

	CAT.	Qty 1+	Qty 2+	Qty 4+
4 Channel 720p AHD DVR	QV-3161	\$289.00	\$259.00	\$239.00
8 Channel 1080p AHD DVR	QV-3157	\$499.00	\$449.00	\$419.00
16 Channel 1080p AHD DVR	QV-3159	\$749.00	\$669.00	\$629.00

## Tech Talk: Surveillance Resolutions Explained

**CIF:** You'll still find CIF quality equipment available, but not nearly as common as it once was, as higher resolution equipment continues to fall in price. It provides 352 x 240 (0.1 Megapixels) resolution. We no longer carry any CIF resolution equipment.

**D1:** You'll find D1 resolution offered on a number of our low-cost solutions. It provides 704 x 480 (0.3 Megapixels).

**960H:** Providing reasonable resolution but still in a value price range. 928 x 480 (0.5 Megapixels). 960h is the same vertical resolution as D1, however it has a widescreen aspect ratio, providing more pixels overall.

**720P HIGH DEFINITION:** 720p was the first resolution classified as high definition, even for televisions. Now almost everything is full high definition, but high definition is still used in many surveillance cameras 1280 x 720 (1 Megapixel).

**1080P FULL HIGH DEFINITION:** This is the most common TV standard, and is considered "Full High Definition". 1920 x 1080 (2 Megapixels). One major benefit of 1080p hardware is it matches pixel-for-pixel, many off-the-shelf displays designed for computers or TV.

**4 MEGAPIXEL ULTRA HIGH DEFINITION:** Providing a marginal increase in resolution over Full HD 1080p, with a resolution of 2560 x 1440 pixels. It provides a marginal increase in resolution over Full High Definition 1080p.

**WHAT ABOUT TV LINES?** TV lines came about when most recording was done with analogue hardware, with tape-storage being the common method. The TV Lines / TVL standard is falling out of favour to Megapixel specifications, mostly because once we hit 1000TVL, it all started getting a little difficult to track. For a basis of comparison however, a 600TVL resolution is approximately 0.4 megapixels, or 1000TVL is approximately equal to 0.9 megapixels. So you can see once we enter high definition territory (2 megapixels or more), the TVL standard becomes a little difficult to manage.

**IN SUMMARY:** The quality of resolution you need is really

determined by your own specific requirements. While "more is better" when it comes to resolution in many ways, consider your own budget and circumstances to find a balance between cost and quality. If you would still like to chat to someone very knowledgeable about surveillance and resolution, find one of our friendly team who can help you find what you need.

To learn more visit [www.jaycar.com.au/resolutionmatters](http://www.jaycar.com.au/resolutionmatters)

### Resolution Relative Size Differences





## PROFESSIONAL DOME & OUTDOOR CAMERAS

### 700TVL CMOS CAMERAS WITH INFRARED LEDS

A robust high resolution security camera suitable for shopping centres, schools, hotels etc. Housed in a waterproof black anodised case it features a high quality colour CMOS sensor, IR LEDs for night time illumination, and a protective sun-shade. With a composite video output for easy integration into existing surveillance setups it is also supplied with a suitable power supply and 18m combined video and power lead.



QC-8653



QC-8654



WARRANTY

SPECIFICATIONS	BOTH (QC-8653/QC-8654)
<b>Supports</b>	CVBS (Analogue)
<b>Resolution</b>	700TVL (792 x 698)
<b>Lens</b>	3.6mm
<b>Lens Angle</b>	72°
<b>Infrared Range</b>	Up to 10m
<b>IP Rating</b>	IP66
<b>Power</b>	12VDC, 500mA
<b>Dimensions</b>	Bull: 135(L) x 85(H) x 68(W)mm Dome: 93(Dia) x 80(H)mm

	TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
700TVL	Bullet	QC-8653	\$79.95	\$71.95	\$67.95
700TVL	Dome	QC-8654	\$79.95	\$71.95	\$67.95

### 1080P AHD/TVI CAMERAS WITH INFRARED LEDS

This camera provides full 1080p high definition and suitable for indoor or outdoor use. It's uniquely compatible with AHD, TVI, CVI and CVBS (Analogue) transmission, for fantastic compatibility with many DVRs. It features a weatherproof IP66 rated case and 30 infrared LEDs for enhanced night vision. Includes a 18m video & power cable and mains power adaptor.



QC-8685



QC-8687



WARRANTY

SPECIFICATIONS	BOTH (QC-8685/QC-8687)
<b>Supports</b>	AHD
<b>Resolution</b>	1080p (1920 x 1080)
<b>Lens</b>	3.6mm
<b>Lens Angle</b>	92°
<b>Infrared Range</b>	Up to 15m
<b>IP Rating</b>	IP66
<b>Power</b>	12VDC, 1A
<b>Dimensions</b>	Bull: 165(L) x 75(Dia)mm Dome: 110(Dia) x 100(H)mm

TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
Bullet	QC-8685	\$129.00	\$115.95	\$108.95
Dome	QC-8687	\$129.00	\$115.95	\$108.95

### 720P AHD CAMERAS WITH INFRARED LEDS

Featuring the latest AHD (Analogue High Definition) technology, these cameras deliver crystal clear images. Backward compatible with standard analogue equipment such as DVRs, video splitters, video balun, etc.

- Supplied with power supply & 18 metre coaxial cable fitted with BNC connectors



QC-8639



QC-8637



WARRANTY

SPECIFICATIONS	BOTH (QC-8637/QC-8639)
<b>Supports</b>	AHD
<b>Resolution</b>	720p (1280 x 720)
<b>Lens</b>	3.6mm
<b>Lens Angle</b>	92°
<b>Infrared Range</b>	Up to 10m
<b>IP Rating</b>	IP66
<b>Power</b>	12VDC, 500mA
<b>Dimensions</b>	Bull: 152(L) x 60(H) x 60(W)mm Dome: 93(Dia) x 80(H)mm

	TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
720p	Bullet	QC-8637	\$99.95	\$89.95	\$84.95
720p	Dome	QC-8639	\$99.95	\$89.95	\$84.95

### 1080P AHD/TVI CAMERAS WITH INFRARED LEDS

Expand your 1080p capable DVR with these high definition cameras. Suits SWANN Pro-series and TechVIEW QV-3154 DVR. Suitable for indoor and outdoor use, and supplied with 18m cable, power supply, mounting hardware and theft deterrent stickers.

- 1080p
- IR LEDs for day/night vision
- IR cut filter
- Weatherproof (IP66)



QV-9008

QV-9006



WARRANTY

SPECIFICATIONS	BOTH (QV-9006/QV-9008)
<b>Supports</b>	AHD/ TVI
<b>Resolution</b>	1080p (1920 x 1080)
<b>Lens</b>	3.6mm
<b>Lens Angle</b>	76°
<b>Infrared Range</b>	Up to 30m
<b>IP Rating</b>	IP66
<b>Power</b>	12VDC, 1A
<b>Dimensions</b>	Bull: 180(L) x 66(Dia)mm Dome: 105(Dia) x 73(H)mm

	TYPE	CAT.	Qty 1+	Qty 4+
1080p	Bullet	QV-9006	\$149.00	\$133.95
1080p	Dome	QV-9008	\$149.00	\$133.95

## PROFESSIONAL DOME & OUTDOOR CAMERAS (CONTINUED)

### 1080P TVI CAMERAS WITH INFRARED LEDS AND PIR DETECT

These 1080p PIR camera is the perfect addition to your 1080p DVR if you need extra cameras. The camera features a True Detect™ PIR motion sensor which is designed to reliably detect people, pets, cars and other heat generating objects. Supplied with 18m cable, mains adaptor and CCTV security sticker.

QV-9009



QV-9007



SPECIFICATIONS	BOTH (QV-9007/QV-9009)
Supports	TVI
Resolution	1080p (1920 x 1080)
Lens	3.6mm
Lens Angle	102°
Infrared Range	Up to 30m
IP Rating	IP66
Power	12VDC, 1A
Dimensions	Bullet: 146(L) x 79(H) x 65(W)mm Dome: 100(H) x 100(Dia)mm

	CAT.	Qty 1+	Qty 4+
Bullet	QV-9007	\$79.95	\$71.95
Dome	QV-9009	\$79.95	\$71.95

### 4K TVI CAMERAS WITH INFRARED LEDS AND PIR DETECT

This 4K (8MP) PIR dome camera is the perfect addition to your 4K DVR if you need extra cameras. The camera features a True Detect™ PIR motion sensor which is designed to reliably detect people, pets, cars and other heat generating objects. Supplied with 18m cable, mains adaptor and CCTV security sticker.

QV-9059

QV-9058



SPECIFICATIONS	BOTH (QV-9058/QV-9059)
Supports	TVI
Resolution	4K (3840 x 2160)
Lens	3.6mm
Lens Angle	80°
Infrared Range	Up to 30m
IP Rating	IP67
Power	12VDC, 1A
Dimensions	Bullet: 160(L) x 70(H) x 70(W)mm Dome: 160(L) x 70(H) x 70(W)mm

	CAT.	Qty 1+	Qty 4+
Bullet	QV-9058	\$229.00	\$199.00
Dome	QV-9059	\$229.00	\$199.00

### 3MP TVI CAMERAS WITH INFRARED LEDS AND PIR DETECT

These 3MP PIR bullet cameras are the perfect addition to your 3MP DVR if you need extra cameras. They feature a True Detect™ PIR motion sensor which is designed to reliably detect people, pets, cars and other heat generating objects. Supplied with 18m cable, mains adaptor and CCTV security sticker.

QV-9034



QV-9032



SPECIFICATIONS	BOTH (QV-9032/QV-9034)
Supports	TVI
Resolution	3MP (2048 x 1536)
Lens	3.6mm
Lens Angle	64°
Infrared Range	Up to 30m
IP Rating	IP66
Power	12VDC, 1A
Dimensions	Bullet: 151(L) x 70(H) x 70(W)mm Dome: 100(Dia) x 100(H)mm

	CAT.	Qty 1+	Qty 4+
Bullet	QV-9032	\$99.95	\$89.95
Dome	QV-9034	\$99.95	\$89.95

### 1080P AHD VARI-FOCAL CAMERAS WITH INFRARED LEDS

These AHD cameras are ideal for a wide range of surveillance applications. The vari-focal lens provides the ability to optimise the viewing angle to suit your particular installation and desired coverage. The high quality 1/3" Sony® Sensor (IMX323) provides high quality 1080p images in analogue high definition (AHD). AHD provides the ability to run very long cables without loss of quality. The inclusion of 36 infrared LEDs provide night vision capability, while on-screen-display (OSD) allows direct control of the camera too.

QC-8672



QC-8674



SPECIFICATIONS	BOTH (QC-8672/QC-8674)
Supports	AHD
Resolution	1080p (1920 x 1080)
Lens	2.8-12mm Adjustable
Lens Angle	32-104°
Infrared Range	Up to 30m
IP Rating	IP66
Power	12VDC, 1A
Dimensions	Bullet: 85(W) x 206(L) x 177(H)mm Dome: 133(W) x 110(H) x 145(D)mm

	TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p	Bullet	QC-8672	\$169.00	\$151.95	\$142.95
1080p	Dome	QC-8674	\$169.00	\$151.95	\$142.95

## ★ STARLIGHT CAMERAS

### 1080P AHD STARLIGHT CAMERAS

Starlight is a revolutionary new sensor technology, providing increased clarity and full colour in low light conditions. Traditionally, low light applications required infrared LEDs to "invisibly" illuminate the field of view (since infrared isn't visible to the human eye it's better than floodlights in many circumstances). However using a narrow portion of the light spectrum results in one clear pitfall - no colour. Starlight addresses this issue by expanding the working shutter speed of the camera to allow much more light in. The result is a clear, full colour image even in extremely low light. It should be noted that starlight cameras cannot see in total darkness (ie, zero light). There must be some available light for them to operate well, or use traditional infrared illumination support. Ideal applications that benefit most from Starlight features would be nightclubs, restaurants, retail situations with mood lighting. Everything else about these cameras is consistent with the quality you expect, with full 1080p Analogue High Definition (AHD) signal, and durable housings. Available as a dome or a bullet camera configuration. They feature a vari-focal 2.8-12mm lens for optimum coverage, and the built-in infrared LEDs will cater for ultra-dark scenarios. That way you know you're covered for just about anything!

- Sony® Starvis IMX291 Starlight sensor
- Built-in infrared for zero light situations




Regular CMOS night time viewing.

Using Starlight technology.



**SONY**  
SENSOR INSIDE

SPECIFICATIONS	BOTH (QC-8678/QC-8680)	
Supports	AHD	
Resolution	1080p (1920 x 1080)	
Lens	2.8-12mm	
Lens Angle	32-104°	
Infrared Range	Up to 40m	
IP Rating	IP66	
Power	12VDC, 1A	
Dimensions	Bullet: 105(W) x 290(D) x 194(H)mm Dome: 145(Dia) x 89(Dia.)mm	


	TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p	Bullet	QC-8678	\$189.00	\$169.95	\$159.95
1080p	Dome	QC-8680	\$189.00	\$169.95	\$159.95

## ★ PAN TILT ZOOM CAMERA

### 1080P AHD PAN-TILT-ZOOM CAMERA WITH INFRARED LEDS

This Pan-Tilt-Zoom bullet camera utilises a Sony® CMOS sensor which delivers 1080p high quality resolution video. Allows you to control the Pan-Tilt-Zoom camera directly from the DVR or associated smartphone app using our 1080p DVRs. This unit communicates by RS-485 which connects directly to the DVR with the included cable to control the 270° total panning and 65° tilt angle. Other functions include Up-The-Coax (UTC) and 4 high powered infrared array LEDs that give up to a 50m night vision range. Includes a 18m video, power & RS-485 cable, mains power adaptor and mounting hardware.



SPECIFICATIONS	QC-8676	
Supports	AHD	
Resolution	1080p (1920 x 1080)	
Lens	4.0mm	
Lens Angle	Pan: 270°, Tilt: 65°	
Infrared Range	Up to 50m	
IP Rating	IP66	
Power	12VDC, 1.5A	
Dimensions	97(W) x 170(H) x 245(D)mm (Including Stand)	

	TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p	PTZ	QC-8676	\$299.00	\$269.00	\$249.00


## ★ IP CAMERAS

### 1080P IR CAMERA WITH INFRARED LEDS

Keep an eye out for intruders with this 1080p @ 30fps video surveillance camera. It can see in the dark up to 30 metres using its IR LEDs. It has an 'ingress protection' rating of IP66, which means dustproof and protected against low pressure water jets from any directions. This makes it suitable for installation outside. It is connected via a RJ45 Ethernet cable and supports up to 100Mbps. The camera is powered by PoE (Power over Ethernet).

- Up to 1080p resolution
- Single cable installation including power
- IR LEDs for night vision
- Rotate, colour saturation, brightness and contrast adjustable
- Supports PoE (Power over ethernet)



SPECIFICATIONS	QC-3133	
Supports	IP	
Resolution	1080p (1920 x 1080)	
Lens	3.6mm	
Lens Angle	83°	
Infrared Range	Up to 30m	
IP Rating	IP66	
Power	12VDC, 1A / PoE	
Dimensions	154(Dia.) x 72(D)mm	

	CAT.	Qty 1+	Qty 2+	Qty 4+
	QC-3133	\$169.00	\$151.95	\$142.95

## Tech Talk: IP Or Network Surveillance

IP surveillance is a digitized and network version of closed circuit television (CCTV). In an IP surveillance system, an IP camera records video footage and the resulting content is distributed over an IP (Internet Protocol) network.

Digitisation offers several benefits over analogue CCTV including:

- Improved search capabilities & greater ease of use
- Better quality images and no degradation of content over time
- The ability to record and play at the same time
- The ability to compress content for improved storage

Adding networking capabilities to digital CCTV provides additional benefits, including:

- Improved ability for remote viewing & control. Anyone on the network with password access can potentially see video from any camera connected to the network.
- IP Storage makes it possible to store data in any geographical location
- Greater ease of distribution. An image of a crime suspect, for example, can immediately be distributed to officials
- The ability to connect to email and other communications systems so that alerts can be sent automatically



## IP CAMERAS (CONTINUED)

### 5MP IP CAMERAS WITH INFRARED LEDS AND PIR DETECT

Enjoy day & night protection with the latest thermal-sensing security & have a bird's eye view of your premises in crystal clear 5 Megapixel Super HD. The Swann 5MP Day/Night Surveillance Bullet Camera delivers everything you need to expand your existing Swann 4K security system. Swann's True Detect™ PIR Thermal Sensing technology detects motion by heat, such as from people & cars, to trigger recording and push notifications.

Supplied with 18m cable, mains adaptor and CCTV security sticker.



QV-9076



QV-9078



SPECIFICATIONS	BOTH (QV-9076/QV-9078)
Supports	IP
Resolution	5MP (2560 X 1920)
Lens	3.6mm
Lens Angle	82°
Infrared Range	Up to 40m
IP Rating	IP66
Power	PoE
Dimensions	Bullet: 151(L) x 70 (H) x 70 (W)mm Dome: 100(Dia) x 100(H)mm

	CAT.	Qty 1+	Qty 4+
Bullet	QV-9076	\$189.00	\$169.95
Dome	QV-9078	\$189.00	\$169.95

### 4K IP CAMERAS WITH INFRARED LEDS AND PIR DETECT

Meet the ultimate in security from Swann – Ultra HD 4K surveillance technology. The Swann Ultra HD 4K Day/Night Surveillance Bullet Camera delivers everything you need to expand your existing Swann 4K NVR security system. Swann's True Detect™ PIR Thermal Sensing technology detects motion by heat, such as from people & cars, to trigger recording and push notifications.

Supplied with 18m cable, mains adaptor and CCTV security sticker.



QV-9084



QV-9082



SPECIFICATIONS	BOTH (QV-9082/QV-9084)
Supports	IP
Resolution	4K (3840 x 2160)
Lens	3.6mm
Lens Angle	93°
Infrared Range	Up to 40m
IP Rating	IP66
Power	PoE
Dimensions	Bullet: 151(L) x 70 (H) x 70 (W)mm Dome: 100(Dia) x 100(H)mm

	CAT.	Qty 1+	Qty 4+
Bullet	QV-9082	\$249.00	\$219.00
Dome	QV-9084	\$249.00	\$219.00

### 720P WI-FI IP CAMERA WITH INFRARED LEDS

Intelligently engineered with ultra-easy pairing setup, you can get installed and configured in minutes. Utilise the free Android or iOS™ app, or software for a Windows PC. It provides high quality 720p video, and 2-way audio communication - so it can be used for access control functions. IR LEDs provide excellent functionality at night too. Record perpetually or using motion detection. Local microSD card storage, or stream directly to your smartphone and store it there. Includes USB mains power adaptor and USB charging cable.

- Easy sound pairing setup
- Free Android & iOS™ Smartphone app
- Windows PC software
- USB powered
- 2 way audio communication
- PIR motion detection & manual recording
- Internal microphone & speaker
- microSD card & Smartphone recording



View live footage on a Smartphone.

Smartphone not included.

SPECIFICATIONS	QC-3849
Image Sensor	1/4" CMOS
Resolution	720p (1280 x 720)
Megapixel	1.0
Frame Rate	25fps
Viewing Angle	110°
Video Compression	H.264
Video Format	.264
Infrared	10 x IR LEDs
Storage	Up to 64GB microSD Card
Power Consumption	500mA
Power Supply	5VDC, 1A
Dimensions	108(H) x 60(W) x 46(D)mm (Excluding Base)

	CAT.	Qty 1+	Qty 2+	Qty 4+
	QC-3849	\$99.95	\$89.95	\$84.95



### WI-FI PIR WITH 720P PINHOLE CAMERA AND INFRARED LEDS

Housed within this Wi-Fi PIR is a pinhole camera which records video in 720p high definition to a microSD card (available separately) or on your Smartphone. Once movement is detected it will send an alert to your Smartphone. Discrete infrared LED's help illuminate a dark room, and there is a microphone built-in so you can listen in the room via your Smartphone. Suitable for almost any area which needs monitoring covertly. Supplied with a mains power adaptor, 3m power cable, mounting bracket & mounting hardware.

- Video & image recording
- Supports iOS® & android Smartphones
- Alarm notification via Smartphone app
- One way audio via Smartphone app
- Motion trigger recording
- Plug & play (P2P) technology, easy network setup



View live footage on a Smartphone.

Smartphone not included.

SPECIFICATIONS	QC-3860
Resolution	720p (1280 x 720), VGA (640 x 480)
Frame Rate	720p @ 25fps, VGA @ 25fps
Viewing Angle	70°
Video Format	ASF (H.264)
Infrared	23 x IR LEDs
Wi-Fi Range	Up to 50m
Frequency	2.4GHz
Storage	Up to 32GB microSD card
Power Supply	6VDC, 800mA
Dimensions	103(L) x 60(W) x 29(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
	QC-3860	\$149.00	\$133.95	\$125.95





## WI-FI IP CAMERAS (CONTINUED)

### 720P WI-FI IP CAMERA WITH INFRARED LEDS

With the convenience of Wi-Fi connectivity, this outdoor camera makes installation a breeze. One of the best features however, is the on-board microSD card storage for self-contained recording functionality. It's easily connected to your Wi-Fi network with easy sound pairing setup, and includes built-in motion detection recording. Using the free iOS™ and Android smartphone app you can connect to the camera and adjust camera parameters, review footage, and so much more. There's also PC software for computer-based monitoring too. On-board, you'll also find 35 IR LEDs for night vision, making this an even more versatile unit. Includes 2m DC extension cable, mains power adaptor and mounting hardware.

- Easy sound pairing setup
- Free Android & iOS™ Smartphone app
- Windows PC software
- In-built audio
- Motion detection & manual recording
- microSD card & Smartphone recording



View live footage on a Smartphone.  
*Smartphone not included.*

SPECIFICATIONS	QC-3841
Image Sensor	1/4" CMOS
Resolution	720p (1280 x 720)
Megapixel	1.0
Frame Rate	25fps
Viewing Angle	75°
Video Compression	H.264
Video Format	.264
Infrared	35 x IR LEDs
Infrared Range	Up to 20m
Storage	Up to 64GB microSD Card
Power Consumption	500mA
Power Supply	12DC, 1A
Dimensions	202(H) x 65(Dia)mm (Including Bracket)



### 1080P WI-FI IP CAMERA

This is a full HD IP camera, with Wi-Fi connection for easy installation and monitoring. It features a magnetic base to quickly adhere to any ferrous metal surface. But this is much more than just a camera! Install your favourite microSD card (up to 64GB) and it's a full recording system too. That's right, no external DVR required! Leave it perpetually recording, or switch it into motion-detection mode. It will not only support automatic recording on detection of movement, it will send 30-seconds of audio and video to your smartphone! The free Android & iOS app provides flexible control and monitoring. What's more is the provision of 2-way audio communication, meaning you can talk to the intruder "you are being watched!", or use it more like a doorphone for less sinister visitors "sorry, i'm not home right now". Infrared LEDs mean it works in just about any lighting conditions too. Setup and configuration is easy, and there's Windows software provided if you prefer to access via computer too. Cost effective, powerful security.

#### Features:

- Video snippet with alert to your smartphone
- 2-way audio transmission
- Free Android & iOS™ Smartphone app



View live footage on a Smartphone.  
*Smartphone not included.*

SPECIFICATIONS	QC-3843
Image Sensor	1/4" CMOS
Resolution	1080p (1920 x 1080)
Megapixel	2.0
Frame Rate	25fps
Viewing Angle	115°
Video Compression	H.264
Video Format	.264
Infrared	14 x IR LEDs
Storage	Up to 64GB microSD Card
Power Consumption	500mA
Dimensions	70(H) x 60(W) x 57(D)mm



CAT.	Qty 1+	Qty 2+	Qty 4+
QC-3843	\$149.00	\$133.95	\$125.95

## WI-FI IP CAMERAS - PAN/TILT

### 720P HIGH DEFINITION PAN/TILT/ZOOM WI-FI IP CAMERA

Nothing beats the versatility of a true Pan /Tilt / Zoom (PTZ) camera for keeping an eye on a diverse area. It provides you full control to modify the field of view and area your camera is monitoring. It connects to your Wi-Fi so installation is a breeze - just pick your position and apply power! The 720p vision will come streaming through, which you can record to your favourite SD card in the camera. Night vision LEDs are included so you're never in the dark, while monitoring can be controlled via the free app on your Smartphone, and you can even speak to the person on camera thanks to the onboard microphone and speaker.



View live footage on a Smartphone.  
*Smartphone not included.*

SPECIFICATIONS	QC-3837
Lens	1 Megapixel 1/4 CMOS
Resolution	720p (1280 x 720)
View Angle	66° Horizontal, 38° Vertical
Pan/Tilt Angle	270° Horizontal, 120° Vertical
Alarm	Motion Detection
Night Vision	5-7m
Audio	Built-In Microphone/Speaker
Storage	Up to 32GB microSD
Video Compression	H.264
Mobile Operating System	Android 4.0 or Higher, iOS 7.0 or Higher
Power	5VDC 1A
Dimensions	105(H) x 82(Dia.)mm



WARRANTY



Wi-Fi



	CAT.	Qty 1+	Qty 2+	Qty 4+
720p PTZ	QC-3837	\$129.00	\$115.95	\$108.95

## Tech Talk: What Is An IP Camera?

An IP camera is a networked digital camera that transmits data over a fast Ethernet link. IP cameras (also called "network cameras") are most often used for IP surveillance, a digitized and networked version of closed circuit television (CCTV).

The benefits of IP cameras over analogue technology include:

- Remote administration from any location
- Digital zoom
- The ability to easily send images and video anywhere with an Internet connection
- Progressive scanning, which enables better quality images extracted from the video, especially for moving targets
- Adjustable frame rates and resolution to meet specific needs
- Two way communications
- The ability to send alerts if suspicious activities are detected
- Lower cabling requirements
- Support for intelligent video

It should be noted that IP surveillance has greater complexity and bandwidth requirements

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required  
– see website, T&C or Store Manager for details.



## ▼ DUMMY CAMERAS

### DUMMY BULLET CAMERA

A realistic looking imitation camera that deters thieves and requires no wiring or other difficulty to install. It includes a CCTV warning sticker for added deterrent and mounting hardware.

- Dimensions: 185(W) x 85(H) x 75(D)mm
- These devices are known to have a strong deterrent effect



CAT.	Qty 1+	Qty 2+	Qty 4+
LA-5338	\$14.95	\$13.45	\$12.45

### DUMMY DOME CAMERA WITH FLASHING LED & CCTV STICKER

A simple and effective visual deterrent. This fake but realistic-looking dome camera features a high brightness flashing red 3mm LED, and is supplied with a yellow CCTV warning sticker. Great for home, office, schools or any location to discourage thieves.

- Requires 3 x AA batteries
- Includes mounting hardware
- Sticker dimensions: 110 x 110mm
- Camera dimensions: 127(Dia) x 90(H)mm



TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
Dome	LA-5332	\$14.95	\$13.35	\$12.70

### DUMMY IR CAMERA

Visible deterrence is probably the most important aspect of security. Most criminals aren't completely stupid - if your premises looks like it has CCTV surveillance, they'll move on to the place that doesn't. These dummy cameras look totally convincing - they have genuine-looking IR LEDs and a real LED that adds to the illusion. Add a couple of warning signs and the baddies will never know the difference.

- Requires 2 x AA batteries
- Mounting hardware included
- UV Stabilised
- Dimensions: 175(L) x 85(Dia)mm



TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
Bullet	LA-5325	\$24.95	\$22.35	\$20.95

## ▼ WARNING SIGNS & STICKERS

### SURVEILLANCE WARNING STICKERS

Make sure people entering your premises know that they will be under video surveillance with this unambiguous message.

#### INSIDE SURVEILLANCE WARNING STICKER

- UV stabilised for long life
- Black printing on a clear background
- Sticks to inside of window
- Dimensions: 80(W) x 40(H)mm



#### OUTSIDE SURVEILLANCE WARNING STICKER

- Silver colour
- Sticks to outside of window
- Dimensions: 80(W) x 40(H)mm



#### LARGE OUTSIDE SURVEILLANCE WARNING STICKER

- Black lettering on white background
- Sticks to outside of window
- Dimensions: 120(W) x 50(H)mm



TYPE	SIZE	CAT.	Qty 1+	Qty 2+	Qty 4+
Small Inside	80 x 40mm	LA-5106	\$2.95	\$2.60	\$2.30
Small Outside	80 x 40mm	LA-5107	\$2.95	\$2.60	\$2.30
Large Outside	120 x 50mm	LA-5108	\$3.95	\$3.45	\$3.15

## DUMMY CAMERA THEFT PREVENTION KIT

Warn off thieves with this theft deterrent pack which includes 2 x bullet cameras, 2 x dome cameras and 4 x CCTV security stickers. The bullet cameras include 23 IR LEDs and one flashing LED for each dome camera to simulate realistic looking cameras.

Everything you need in one pack to discourage thieves. Perfect for homes, offices, schools etc.

- Batteries required:  
Dome - 3 x AA (not included)  
Bullet - 2 x AAA (not included)
- Dimensions: 170(L) x 58(Dia)mm (Bullet Camera)  
125(Dia) x 95(H)mm (Dome Camera)



TYPE	CAT.	Qty 1+	Qty 2+	Qty 4+
2 x Bullet, 2 x Dome	LA-5336	\$59.95	\$53.95	\$50.95



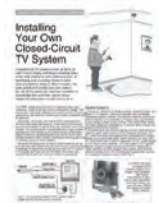
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[www.jaycar.com.au](http://www.jaycar.com.au)

## ▼ INSTALLATION GUIDE

### CCTV INSTALLATION GUIDE

This guide explains the various pieces of equipment required, the options available for installation and the different methods of viewing and recording the images. Topics cover camera types, lenses, light levels, power supplies, camera positioning, switchers, monitors and recorders.



	CAT.	Qty 1+
8 pages, A4	BI-8206	\$2.00

### CCTV STICKER - 120 X 120mm

Visible deterrent to intruders. Bright yellow to attract attention. Partner with a dummy camera or two for a complete faux security system or just to warn that the real thing is installed.



	CAT.	Qty 1+	Qty 4+	Qty 8+
120(W) x 120(H)mm	LA-5101	\$4.95	\$4.45	\$3.95

### SURVEILLANCE WARNING SIGN 300 X 300mm

Visual deterrents are one of the most effective security measures you can use. This sign will ward off thieves and let them know you have state-of-the-art surveillance on your property even if you don't. It's made of acrylic, so it's lightweight and durable.



	CAT.	Qty 1+	Qty 2+	Qty 4+
300(W) x 300(H)mm	LA-5115	\$14.95	\$13.35	\$12.70

### CCTV WARNING SIGN

Prominent warning sign for CCTV or dummy surveillance applications. Made from acrylic for durability.



	CAT.	Qty 1+	Qty 4+	Qty 8+
300(W) x 210(H)mm	LA-5114	\$14.95	\$13.35	\$11.70



## ✓ CCTV LEADS & ACCESSORIES

### DC POWER LEADS - 2.1MM PLUGS TO SOCKET

Run multiple devices from a single power supply or extend the low voltage cable between a plugpack and a device. Ideal for surveillance applications and available in a range of versions to suit many applications. All cables are pre-made with moulded DC plugs and sockets.

- Three types available.
- DC Plug / Socket Dimensions:  
2.1(ID) x 5.5(OD) x 10(L)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
1 Socket to 2 plugs - 200mm	WQ-7280	\$7.95	\$6.95	\$6.75
1 Socket to 2 plugs - 2m	WQ-7284	\$8.95	\$7.95	\$7.50
1 Socket to 4 plugs - 800mm	WQ-7281	\$9.95	\$8.75	\$8.25

### CCTV VIDEO & POWER CABLE

- BNC terminated
- Male DC plug on one end, female DC socket at the other
- 18m length



LENGTH	CAT.	Qty 1+	Qty 2+	Qty 4+
18m	WQ-7279	\$19.95	\$17.70	\$16.70

### CCTV CAMERA POWER EXTENSION LEAD

Extend the plugpack lead for CCD camera

- Consists of 2.1mm male to female
- Plug OD 5.5mm



LENGTH	CAT.	Qty 1+	Qty 2+	Qty 4+
5m	WQ-7285	\$9.95	\$8.75	\$8.25

### CCTV CAMERA EXTENSION LEADS

The easy way to extend the length of CCD camera cables. The leads have 3 joined cables, BNC plug to plug, RCA plug to plug, and DC power male to female. The video cable used is quality RG59U, and the power cable for the shorter lengths is 24 gauge, and the 2 longer lengths are 18 gauge.



LENGTH	CAT.	Qty 1+	Qty 2+	Qty 4+
5m	WQ-7275	\$19.95	\$17.95	\$16.95
10m	WQ-7276	\$34.95	\$31.45	\$29.70
15m	WQ-7277	\$44.95	\$40.45	\$38.20
20m	WQ-7278	\$59.95	\$53.95	\$50.95

### EXTRA LONG CCTV VIDEO & POWER EXTENSION CABLES

Great for connecting surveillance cameras. Includes BNC (video) and DC (power) connectors, for no-fuss installation of AHD/TVI type cameras. Quality video transmission, and available in two lengths for various installations.



	CAT.	Qty 1+	Qty 2+	Qty 4+
30m	WQ-7283	\$19.95	\$17.95	\$15.95
60m	WQ-7287	\$39.95	\$35.95	\$33.95

### CCTV VIDEO & POWER EXTENSION CABLE

Universally compatible BNC security camera extension leads suitable for analogue (AHD/TVI) cameras. Weatherproof when sheltered, and white in colour to suit home and office interiors. Includes BNC female adaptor for attaching to existing cables.



	CAT.	Qty 1+	Qty 4+
30m	QV-9018	\$29.95	\$26.95
60m	QV-9020	\$49.95	\$44.95

## 2.1MM DC CONNECTORS



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Plug - Screw Terminals	PA-3711	\$4.95	\$4.45	\$4.00
Socket - Screw Terminals	PA-3713	\$4.95	\$4.45	\$4.00

## BNC WITH TERMINALS



	CAT.	Qty 1+	Qty 4+	Qty 10+
Screw Terminal	PA-3715	\$4.95	\$4.45	\$4.00

## BNC ADAPTORS



TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
BNC Plug to BNC Plug Adaptor	PA-3665	\$4.95	\$4.45	\$3.90
BNC Plug to BNC Socket R/A	PA-3663	\$4.95	\$4.45	\$3.90

## BNC PLUG TO BNC PLUG

RG-59U coaxial cable



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7300	\$9.95	\$8.75	\$7.75

## MICROPHONE/AMP FOR CCTV CAMERAS

Easy add-on mini microphone with built-in amp for cameras that require an audio function. Simple to install and ideal for all surveillance applications.

- High sensitivity microphone (-65dB)
- 12VDC operation



LENGTH	CAT.	Qty 1+	Qty 2+	Qty 4+
500m	QC-3434	\$24.95	\$22.45	\$21.20

## EXTERNAL CCTV CAMERA HOUSING MOUNTING BRACKET

This heavy-duty aluminium bracket is designed to mount our large indoor/outdoor professional camera housing and professional range of CMOS cameras. It is suitable for either internal or external use and the camera angle is fully adjustable. Mounting screws and wall plugs included.

- Maximum payload 8kg
- Supplied in silver finish
- Bracket height is 300mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
	QC-3337	\$14.95	\$13.45	\$12.45

## ✓ CAMERA POWER SUPPLIES

### AC/DC - DC CONVERTER 24 - 12VDC 1A

Trying to get power for CCTV and security cameras over a long run without losses is challenging to say the least. Solve the problem quickly and easily by sending 24VAC down the long run, then converting it to 12VDC when you get it where you need it.

Connection is by screw terminals



SPECIFICATIONS	MP-3350
Input	20 - 28VAC, 16 - 30VDC
Output	12VDC regulated
Output Current	1A max
Dimensions	90(L) x 25(W) x 25(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC/24VDC 1A	MP-3350	\$39.95	\$35.95	\$31.95



To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

## CCD CAMERA POWER SUPPLIES

12VDC regulated plugpack ideal for CCD cameras.

- Terminates to a 2.1mm ID / 5.5mm OD DC plug, centre positive



	CAT.	Qty 1+	Qty 5+	Qty 10+
12VDC 500mA	MP-3011	\$19.95	\$17.95	\$15.95
12VDC 1.5A	MP-3486	\$24.95	\$22.35	\$19.70

## BALUNS

### BNC TO CAT5E/6 UTP AHD VIDEO BALUN KIT

Extend the transmission distance of your CCTV cabling without the need for a video amplifier. The balun accepts all composite video signals such as AHD, TVI and CVI. To use the baluns, strip away your UTP Cat5 cable at the ends and use a stranded pair connecting one wire to the positive terminal and the other to the negative terminal.

Note the colour of the wires used and repeat the process at the other end. This kit includes two baluns; one to act as the transmitter and the other the receiver. It is suitable for CCTV setups, multimedia presentations and video conferencing.



SPECIFICATIONS	QC-3667
Network Cable	UTP Cat6, Cat5e, Cat5
Transmission Distance	Up to 400m
Camera Support	AHD, TVI, CVI, Analogue
Dimensions	38(L) x 19(H) x 12(W)mm

CAT.	Qty 1+	Qty 2+	Qty 4+
QC-3667	\$14.95	\$13.45	\$12.70

### BNC/RCA/POWER TO CAT5E/6 AHD VIDEO BALUN KIT

Simplify your CCTV installation by combining composite video, audio and power for transmission over one UTP Cat6, 5 or 5e cable. The balun accepts all composite video signals such as AHD, TVI and CVI. This kit includes two baluns; one to act as the transmitter and the other the receiver. It is suitable for CCTV setups, multimedia presentations and video conferencing.



SPECIFICATIONS	QC-3669
Network Cable	UTP Cat6, Cat5e, Cat5
Transmission Distance	Up to 300m
Camera Support	AHD, TVI, CVI, Analogue
DC Connection	2.1mm
Supported Voltage	12-24VDC
Dimensions	60(L) x 28(H) x 19(W)mm

CAT.	Qty 1+	Qty 2+	Qty 4+
QC-3669	\$29.95	\$26.95	\$25.45

## POWER-OVER-ETHERNET

### POWER-OVER-ETHERNET (POE) PASSIVE KIT

PoE allows transfer of electrical power, along with data, over twisted pair cables. Finding a power supply is a common obstacle in LAN installations: PoE allows you to power wireless access points or other equipment via a Cat 5 cable without the need to have a separate power source available.

- You simply connect a plugpack of the required voltage via the 2.1mm DC connector, then tap it where you need it at the other end



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8410	\$14.95	\$13.45	\$11.95

## Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.

## GIGABIT POE INJECTOR

Power Over Ethernet (PoE) devices are becoming more commonplace, such as IP cameras, telephones, and many more small devices which require a small amount of power to operate. However most conventional Ethernet switches do not natively support PoE. This device adds the power inline to a single network cable, working up to 100m, so you don't need mains power down the line at the device. It supports up to gigabit network throughput for ultra-fast connectivity, and is PoE IEEE 802.3at compliant



SPECIFICATIONS	YN-8040
Input	1 x RJ45, 1 x AC Power Input
Output	1 x RJ45
Network	Gigabit up to 100m
PoE Output Power	52V @ 30W max
PoE Standard	IEEE 802.3at
Input Voltage	100-240VAC
Power Demand	35W max
PoE Power Supply End-Span	1/2, 3/6 spare line pair (default); mid-span: 4/5, 7/8 data line pair (can be customised)
Dimensions	118(W) x 60(D) x 38(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8040	\$59.95	\$53.95	\$47.95



## 5 PORT POE SWITCH

Power Over Ethernet (PoE) simplifies installation for IP telephones, routers, IP cameras, and more. It reduces the need for mains power at each IP camera location, for instance, powering them from a central supply. Suitable for use up to 100m, it provides up to 30W per PoE port.



SPECIFICATIONS	YN-8074
Ports	1 x 10/100 RJ45 4 x 10/100 RJ45 High Power PoE
PoE Port Power	30W (per port)
Max Combined PoE Power	65W
Backplane Bandwidth	1.6Gbps (non-blocking)
Max PoE Distance	100m
Network Protocols and Standards	IEEE 802.3i 10BASET, IEEE 802.3u 100BASETX IEEE 802.3x Flow Control, IEEE 802.3af DTE Power via MDI IEEE 802.3at
Power Input	100-240VAC @ 50/60Hz
Dimensions	118(W) x 85(D) x 27(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8074	\$119.00	\$106.95	\$94.95



## 10 PORT GIGABIT POE NETWORK SWITCH

PoE simplifies power delivery for IP surveillance, telephone, and many other systems. This is a powerful gigabit switch with 8 x PoE-enabled and 2 x standard gigabit ports. It can deliver up to 130W of power (max 30W to a single port), which is loads of power for just about any PoE-enabled device you may have. Ultra-fast gigabit network also enables fast data transfer, critical for high resolution IP cameras and data-intensive systems, and is also very useful for providing PoE to access points and switches which are also distributing the connection. Automatic PoE detection, fully compatible with non-PoE devices. Includes mains power adaptor and mounting bracket.



SPECIFICATIONS	YN-8049
Ports:	8 x PoE (RJ45) 2 x Uplink (RJ45)
Power Output:	30W Per Port (Max) 15.4W Per Port (Across 8 Ports) 130W (Total)
PoE Standards:	IEEE 802.3at, IEEE 802.3af
Network Speed:	10/100/1000Mbps
Transmission Distance:	Up to 100m
Power Supply:	52VDC, 2.5A (Mains adaptor included)
Dimensions:	189(W) x 102(D) x 28(H)mm

CAT.	Qty 1+	Qty 2+	Qty 4+
YN-8049	\$229.00	\$199.00	\$189.00

## POWER-OVER-ETHERNET (CONTINUED)

### POE POWER SPLITTER

Power Over Ethernet (PoE) is one of the most convenient sources of sending power to remote devices available. But what if your device doesn't support PoE, but your network switch provides the functionality? This device splits the PoE into a regular ethernet, and 12VDC plug. This allows you to power small network switches, IP cameras, and all sorts of other devices which may not support PoE natively. Providing 10/100Mbps ethernet speeds and up to 1.25A to the 12V plug.



SPECIFICATIONS	YN-8414
PoE Voltage Input	44-57V
Voltage Output	12VDC @ 1.25A Max
Connectors	1x RJ45 PoE socket, 1x RJ45 ethernet plug, 1x DC plug
Protocol	IEEE 802.3 i 10 BASE-T, IEEE 802.3u 100 BASE-TX, IEEE 802.3 x Flow Control, IEEE 802.3af Power over Ethernet
Data Rate	10/100Mbps
Dimensions	35(W) x 505(D) x 30(H)mm



CAT.	Qty 1+	Qty 2+	Qty 4+
YN-8414	\$19.95	\$17.95	\$16.95

## SURVEILLANCE ACCESSORIES

### CAMERA DETECTOR

Protect your privacy! Covert cameras and listening device are nearly impossible to spot by the naked eye. This handy little unit will detect hidden wired and wireless cameras through the units lens finder. The 6 pulsing LEDs reveals the location of a camera by illuminating it's lens when you look through the lens viewer. Also features a built-in wireless RF detector that provides audible (buzzer) and visual (LED) signal strength indication. Great for detecting wireless transmitters and eavesdropping devices. It even comes with a set of earphones for complete discrete bug detection. Requires 2 x AAA batteries (use our SB-2426).



SPECIFICATIONS	QC-3506
Laser Detection Range	0.1 - 10m
RF Detection Range	0 - 10m
RF Frequency Range	1.0MHz - 6.5GHz
Dimensions	85(H) x 56(W) x 18(D)mm

CAT.	Qty 1+	Qty 4+	Qty 8+
QC-3506	\$99.95	\$89.95	\$79.95

### AHD TO HDMI CONVERTER

Analogue High Definition (AHD) is an amazing technology allowing high definition video to be transmitted over long distances. This unit allows you to monitor an AHD or analogue camera on your TV, computer monitor or projector using standard HDMI. It also provides AHD pass-through so the feed can still run to your DVR or other surveillance equipment. Switchable between 1080p and 720p resolution.



SPECIFICATIONS	AC-1778
Inputs	1 x BNC (AHD)
Outputs	1 x HDMI, 1 x BNC (AHD)
AHD Input Resolution	1080p @ 30Hz, 720p @ 60/50/30Hz
AHD Output Resolution	1080p @ 30Hz, 720p @ 60/50/30Hz
HDMI Resolution	1080p @ 60Hz, 720p @ 60Hz
AHD Cable Distance	Up to 500m
Power Supply	5VDC, 1A
Dimensions	90(W) x 58(D) x 26(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1778	\$119.00	\$106.95	\$100.95

### LONG RANGE INFRARED SPOTLIGHT

CMOS and CCD surveillance cameras are often designed with only minimal night vision range or sometimes without infrared LEDs at all. This high-power spotlight will add or increase your existing surveillance cameras infrared viewing range of up to 50 metres. The six built-in LEDs switch on automatically at night or when dark conditions are detected. The compact size of the spotlight is ideal where unobtrusive surveillance in low light areas is preferred, such as warehouses, driveways, backyards, alleyways and boundary line fences. Includes a 12VDC power supply and mounting hardware.

- Automatic day/night operation
- 180° bracket adjustment



SPECIFICATIONS	QC-3654
Infrared LEDs	6 x 3W
Infrared Angle	60°
Effective Infrared Range	Up to 50m
IP Rating	IP65 Weatherproof
Power Supply	12VDC, 1.5A
Dimensions	165(L) x 84(Dia)mm



CAT.	Qty 1+	Qty 2+	Qty 4+
QC-3654	\$79.95	\$71.95	\$67.95

### 19.5" LED SURVEILLANCE MONITOR

A quality monitor is essential for any surveillance installation. The high resolution display will give you clear vision, with more than enough room to show a quad-display if you're viewing a DVR or other quad-display source. The LED backlight helps reduce heat and increase longevity of the monitor too. Audio in/out is provided so you don't need separate speakers to hear what's going on, if you're monitoring audio also. It is powered directly from mains power (mains to IEC cable supplied), and even includes a HDMI cable.



SPECIFICATIONS	QM-3580
Panel Size	19.5"
Aspect Ratio	16:9
Resolution	1600 x 900
Brightness	200cd/m²
Response Time	5ms
Contrast Ratio	1000:1
Inputs	HDMI, VGA, BNC, S-Video, and a 3.5mm Audio
Outputs	BNC and a 3.5mm Audio
Speakers	2 x 2W
Dimensions	350(H) x 467(W) x 164(D)mm (Including Base)

CAT.	Qty 1+
QM-3580	\$269.00

### 3.5" PURPLE 2TB SURVEILLANCE HDD

The purple range of western digital drives are built for 24/7 always on surveillance. They are drop in replacements for desktop drives which aren't designed for the harsh always-on high-definition surveillance environment. This range has been specifically engineered for a high level of compatibility with DVR systems and are equipped with AllFrame technology which reduces frame loss, improves playback and increases number of drive bays supported. With exclusive IntelliSeek™ technology, WD Purple drives calculate the optimum seek speeds which lowers power consumption, noise and vibration that can damage and cause drives to wear out more quickly. When you invest in a premium surveillance-class drive you worry less while enjoying the benefits over a longer period of time.

- Power requirements
- Read/write: 4.4W
  - Idle: 4.1W
  - Standby and sleep: 0.4W



SPECIFICATIONS	XC-5682
Form Factor	3.5"
Buffer To Host Transfer Speed	6Gbps
Host To/From Drive (Sustain)	145Gbps
Operating Temperature	0-65°C
Idle Acoustics	23dBa
Seek Acoustics (Average)	24dBa
Dimensions	147(L) x 101.6(W) x 26.1(H)mm, 640g

See page 325 for our 2.5" 1TB Notebook HDD

CAT.	Qty 1+
XC-5682	\$159.00





## SPECIAL APPLICATION CAMERAS

### 1080P MINI AHD CAMERA

This mini 1080p camera is ideal for situations where limited space is a problem. Perfect for covert home security, retail stores or even in car or truck surveillance. This unit features the latest HD analogue solutions AHD, TVI, CVI and CVBS (analogue). Includes a BNC plug to RCA plug adaptor and mounting hardware.



SPECIFICATIONS	QC-8651
Camera Type	AHD/ TVI / CVI / CVBS (Analogue)
Resolution	1080p (1920 x 1080)
Megapixels	2.0
Frame Rate	25fps
Lens	3.6mm
Lens Angle	75°
Infrared	10 x IR LEDs
Infrared Range	Up to 10m
Power	12VDC, 500mA
Dimensions	42(H) x 42(W) x 35(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p Mini AHD Camera	QC-8651	\$59.95	\$53.95	\$50.95

## Outdoor Monitoring Cameras

The units shown below (QC-8027, QC-8041, QC-8043) are not only good for monitoring the movement of wildlife. They are also fantastic for keeping an eye on human intruders. If you have problems with robberies (especially at night) of a yard where you store valuable equipment, say a boatyard or machinery yard, you can set one or two of these cameras up to video the thieves. It should not be hard to get a shot of a face to show to the police. If you can show the police a picture of a culprit, it's more than likely that they know them already.

## STANDALONE CAMERAS WITH RECORDING

### OUTDOOR 5MP SECURITY CAMERA WITH PIR

A motion activated weatherproof camera suitable for outdoor domestic security applications. It will record video in 720p quality when motion is detected for you to playback later on a computer or TV.

- Features a bright 38 LED infrared light to illuminate objects at night, LCD status display, and schedule function
- SD card is required (available separately) as well as 4 x C batteries, which can last for months
- Option for a 6VDC power supply (use MP-3145)
- Easy to install and operate



SPECIFICATIONS	QC-8027
Picture Resolution	8MP max
Video Resolution	1280 x 720 (20fps) with Audio
Effective Range	9m
PIR Sensor	48°
Lens	50° Field of View
IP Rating	IP66
IR Range	Up to 9m
IR Illumination	38 IR Emitters
Time Lapse	5 - 600 seconds programmable
Delay Time	1 - 600 seconds programmable
Stamping	Date/Time stamped on still image/video
External Memory	SD card up to 32GB
Power Supply	4 x C cells or 6VDC (not included)
Dimensions	140(H) x 75(Dia.)mm, 280g



	CAT.	Qty 1+	Qty 2+	Qty 4+
5MP Outdoor Camera	QC-8027	\$189.00	\$169.95	\$160.45

### 600TVL HIDDEN CAMERA MIRROR

Designed for use where concealed high security is the main requirement such as retail stores, offices, museums, art galleries etc. To most people it looks like a simple convex security mirror but embedded behind the patented reflective layer is a 600TVL security camera.

- Features built-in colour digital noise reduction
- 3.6mm lens with standard BNC for connection to your DVR
- Ideal size for easy wall mounting



	TYPE	CAT.	Qty 1+
600TVL	Mirror	QC-8631	\$79.95

### LCD CLOCK WITH HIDDEN 720P CAMERA - STANDALONE

A full function LCD clock with a hidden 720p high definition camera. Set it up in an area of concern and it will detect motion then commence recording footage in high definition (1280 x 720) onto a microSD card. Playback the files on a computer using the supplied USB cable to see what really happened. An infrared remote control is also included so you can manually record. It includes a rechargeable battery, which can be recharged from a USB port of a computer or USB adaptor with the supplied cables. It is a fully functional clock, with time, date, alarm and three brightness settings. Includes a 4GB microSD card.



Camera

SPECIFICATIONS	QC-8660
Resolution	720p (1280 x 720)
Video Format	AVI
Viewing Angle	120°
Charge Time	Up to 3 hours
Run Time	Up to 3 hours
Storage	Up to 32GB microSD card (4GB included)
Dimensions	115(W) x 68(H) x 38(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
LCD Clock Camera	QC-8660	\$129.00	\$115.95	\$109.95

### OUTDOOR TRAIL CAMERAS

Trail cameras are great for monitoring local wildlife and of course, can also be used as an outdoor security monitor. They can work for up to 6-months while the weatherproof IP66 case keeps the electronics safe in any weather. An ultra bright infrared flash provides night operation without startling animals. A wide-angle PIR detects motion, to trigger the shutter in just 0.4 seconds. It can start video, or a photo burst up to 9-frames. A large 2.4" LCD provides easy review of footage and adjustment of settings.

#### Features:

- 2.4" TFT-LCD colour display
- High resolution stills and video
- IP66 weatherproof
- Up to 6 months standby time



SPECIFICATIONS	QC-8041	QC-8043
Video Resolution	720p (1280 x 720)	1080p (1920 x 1080)
Image Resolution	8M	12MP
Effect Range	Up to 15m	Up to 20m
Lens Angle	73°	55°
Quick Trigger Time	1 Second	0.4 Seconds
PIR Sensor Angle	60°	120°
Infrared LEDs	26	42
Battery Life	Up to 6 months standby	
Batteries	8 x AA	
Storage	Up to 32GB SD card	
IP Rating	IP66	
Dimensions	135(H) x 100(W) x 80(D)mm	

	CAT.	Qty 1+	Qty 2+	Qty 4+
720p	QC-8041	\$149.00	\$133.95	\$125.95
1080p	QC-8043	\$199.00	\$178.95	\$168.95

## WIRED & WIRELESS

### 7" LCD WIRED VIDEO DOORPHONE

Find out who's knocking before you open the door! The fantastic resolution from the camera and monitor puts the power at your fingertips, providing you with clear vision to identify visitors. Even at night the night vision LEDs will help provide a clear picture regardless of ambient light. The camera is mounted into a strong, weatherproof, rust-free, vandalism-resistant alloy metal housing, for protection against damage. The monitor is a sleek wall-mounted light-touch interface with a full colour 7-inch screen. The system provides electric-lock control, monitoring functionality, as well as full talk-back to the outdoor unit. There is also a selection of 16 melodies to choose from when a visitor comes calling. Includes 15m of cable between the indoor and outdoor unit, but can be extended up to around 50m. All power supply and mounting hardware is included. Additional monitors can be added to provide control from multiple parts of the house.

- Full colour 7" widescreen with soft-touch buttons
- Effective night vision LED support
- Electric lock control
- DIY installation



SPECIFICATIONS	QC-3880
<b>Indoor Unit (Screen):</b>	
Screen Size	7"
Resolution	800 x 480 full colour
Power Input	12VDC @ 1.1A
Working Distance	Up to 50m (15m cable included)
Weight	420g (excluding bracket)
Dimensions	Camera: 127(H) x 47(W) x 35(D)mm Monitor: 215(W) x 152(H) x 20(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
7" LCD Wired Video Doorphone	QC-3880	\$199.00	\$178.95	\$158.95
Additional Doorphone	QC-3882	\$159.00	\$142.95	\$126.95

### SWANN 720P WI-FI VIDEO DOORBELL

A smart rechargeable video doorbell that can simply be connected to your existing Wi-Fi network. Allows you to see and talk to visitors via the built-in camera, speakers & microphone on your Smartphone. It also lets you playback video on your Smartphone & keep video clips to share with law enforcement or social media. Main doorbell unit is recharged via USB.

#### Box Contents:

- 1 x Video doorbell
- 1 x Chime
- 1 x USB to micro USB charging cable
- 1 x Security sticker
- 1 x Mounting hardware

SPECIFICATIONS	QV-9090
Camera Resolution	720p
App	SwannBuz (iOS® & Android)
Power (Chime)	2 x AA batteries (sold separately)
Dimensions	Outdoor Unit: 70(W) x 144(H) x 39(D)mm Indoor Unit: 65(W) x 105(H) x 28(D)mm



	CAT.	Qty 1+	Qty 4+
	QV-9090	\$229.00	\$199.00

### 2.4GHZ DIGITAL WIRELESS 7" LCD VIDEO DOORPHONE

This unit features an impressive wireless range of up to 50m. The modern indoor monitor features touch sensitive buttons and easy operation. The camera unit provides clear full-colour vision through the day and night-vision when it's dark. Two-way talkback with the outdoor unit is made simple, and door-lock control is included. Another great feature is the photo-storing system, providing you the ability to store up to 100 snapshots of visitors. Let's not forget that this unit integrates full battery backup control, with internal Lithium batteries. This retains full functionality of your doorphone system in the event of a power outage! All mounting hardware and power supplies are included.

- Two-way intercom
- Wireless range up to 50m
- Battery backup functionality

SPECIFICATIONS	QC-3884
Camera Resolution	380TVL
Transmission Distance	300m
Monitoring Time	90 sec approx.
Dimensions	Outdoor Unit: 75(W) x 154(H) x 33(D)mm Indoor Unit: 230(W) x 130(H) x 32(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
	QC-3884	\$399.00	\$359.00	\$319.00

## INTERCOMMS & DOORBELLS

### 2 STATION WIRED INTERCOM

Either station can signal the other even when the system is off. It can be used as a room/baby monitoring system.

- Adjustable volume
- Call facility even when unit is off
- Hands-free communication on sub-station
- Requires a 9V battery or 240V plugpack use MP-3146
- Supplied with 20m of connecting cable and staples

Domestic use only. Warranty does not apply if product is used industrially.



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
Wired - Pair	AM-4310	\$29.95	\$26.90	\$23.70

### 2 STATION WIRELESS FM INTERCOM

Plugs into a 240V power point and will send to another room, upstairs etc. Both units need to be on the same channel and on the same mains phase to communicate. The intercom has a built-in monitor function so you can put one in a baby's room and listen from another location around the house. Additional units can be added to the system to provide a multi-point intercom system.

- Transmission through house wiring
- 2 Channels
- Power points used must be on same phase, ideally the same circuit



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
Wireless - Pair	AI-5500	\$74.95	\$67.50	\$59.95

### WIRELESS DOORBELL

Install a doorbell without the mess of wires and drilling. This simple home wireless doorbell has 32 melodies to choose from and is completely wireless so all you need to do is secure the transmitter next to your door and place the receiver unit where it can be heard. It has an operating range of 50 metres in open air and is suitable for homes and office buildings.

- Easy to install at an affordable price
- 433MHz
- Requires 3 x AAA batteries



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 8+
Doorbell with 32 Melodies	LA-5018	\$16.95	\$14.95	\$13.45

### BATTERY OPERATED WIRELESS DOORBELL

A simple battery operated doorbell that includes 36 selectable melodies and includes a 4 level volume adjustment. With a 50m wireless transmission range, it will cover any distance of your house or apartment. Simple plug and play with easy installation. Mounting hardware included.

- Up to 50m Range
- 36 Melodies
- 4 Level Volume Adjustment
- Low Battery Indicator



SPECIFICATIONS	LA-5048
Wireless Frequency	433MHz
Batteries	1 x CR2032 Included (Transmitter) 3 x AAA (Receiver)
IP Rating	IP54 (Transmitter)
Dimensions	210(H) x 96(W) x 35(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 8+
	LA-5048	\$19.95	\$17.95	\$15.95

### WIRELESS DOORBELL - 240VAC PLUG

Simple plug and play in design. This compact sized doorbell receiver plugs into a power point and is not much bigger than a slim line power supply, so it fits on your powerboard or double wall socket without taking up too much space. Once plugged in, the battery powered wireless doorbell button can transmit up to 100 metres chiming out one of the 32 selectable melodies.

- 433MHz
- Suitable for rental properties, apartments and small offices



WARRANTY

PLUGS DIRECTLY INTO A POWER POINT

	CAT.	Qty 1+	Qty 4+	Qty 8+
240VAC Plug-in Doorbell	LA-5029	\$24.95	\$22.35	\$19.70

### WIRELESS DOOR BELL WITH DOOR / WINDOW SENSOR

A convenient way to add entry alerts to a home or a small business. Included is a wireless doorbell and a wireless window sensor. The doorbell button will trigger the doorbell to sound off one of 7 user selectable chime sounds. The window sensor, which is triggered by a reed switch, can be installed on a window (or door) and will trigger the chime when the window is closed or opened depending on how you choose to position the sensor. The doorbell can be left freestanding or mounted to a wall with the supplied mounting accessories. The doorbell button and window sensor can trigger different sounds so you know where entry has occurred. Overall, a totally wireless, hasslefree doorbell system.

- 7 unique doorbell sounds
- LED low battery indication



SPECIFICATIONS	LA-5055
Range	Up to 50m
Wireless Speaker Requires	3 x AA batteries (not included)
Doorbell Button Requires	1 x A23 battery (included)
Wireless Window Sensor Requires	2 x AAA batteries (not included)
Doorbell Dimensions	163(H) x 90(W) x 42(D)mm
Doorbell Button Dimensions	88(H) x 28(W) x 24(D)mm
Window/Door Sensor Dimensions	87(H) x 39(W) x 25(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 8+
Doorbell with Door/Window Sensor	LA-5055	\$49.95	\$44.95	\$39.95

### HIGH SOUND LEVEL WIRELESS DOORBELL WITH STROBE FOR THE HEARING IMPAIRED

When this doorbell rings, the sound is accompanied by several bright flashes from the receiver's built in strobe light, which makes it much easier for a hearing impaired person to know that someone is at the door.

The sounder can be taken from room to room, or even used outdoors and will work up to 30 metres from the transmitter button. The melody can be set to one of seven different sounds and has two volume levels - medium and loud. The unit is supplied with a neck lanyard and mounting hardware for the transmitter button.

- Requires 4 x C cells, available separately
- 210mm long



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 8+
Doorbell with Light Strobe	LA-5002	\$54.95	\$49.45	\$43.90

## DOOR & DRIVEWAY BEAMS

### INDOOR COMMERCIAL GRADE DOORWAY BEAM

A compact entry warning system is designed for use in shops, restaurants, doctors and dentist surgeries etc. to alert you to the entry of customers and visitors. The system consists of a send/receive unit which transmits an IR beam across the doorway onto a prismatic reflector mounted on the opposite side. The beam is reflected back to the receiver to complete the circuit. When a person walks through the beam, the circuit is interrupted and this causes the alarm to sound an audible warning. The warning buzzer can be mounted in any suitable location up to 10m away.

- Mains plugpack and mounting hardware included.
- Range 2 - 6 metres
- Power: 9VDC
- Adjustable alarm time and volume
- Transmitter/Receiver size 70(H) x 60(W) x 30(D)mm
- Reflector size: 65 x 53mm



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 8+
Doorway Beam	LA-5193	\$79.95	\$71.95	\$63.95





## DOOR & DRIVEWAY BEAMS (CONTINUED)

### COUNTER TO SUIT DOORWAY BEAM LA-5193

Attach to our LA-5193 Door Beam units to easily measure the door entry count in your shop, factory or office. The 20m lead carries both the signal and power, allowing you to mount the counter in a convenient location away from the door entry. This product is a must have for the serious retailer to easily measure the store traffic to sales conversions in their store.

- Counts up to 9999
- Includes '+' '-' and 'Reset' buttons
- Dimensions: 60(W) x 70(H) x 23(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 8+
Counter	LA-5197	\$49.95	\$44.95	\$39.95

### DOOR EXTENSION BUZZER TO SUIT LA-5193

This neat and compact buzzer can be mounted anywhere and is recommended as an addition to our Door Security Beam with Reflector (LA-5193) as an extension alarm. The volume of the buzzer is adjustable and the sound output can be selected by a slide switch to Alarm, Off or Chime. The sounding time can also be adjusted from 3 to 30 seconds.

- Supplied with mounting hardware, a 10m lead and an adjustment screwdriver



SPECIFICATIONS	LA-5188
Input Voltage	9 - 15VDC
Consumption Current	25mA Max
Ambient Temp	-20°C - 50°C (-4°F - 122°F)
Response Time Of Buzzer	Chime: 1sec. Alarm: 30sec
Volume Of Speaker	0 - Max (adjustable)
Alarm Time	30 sec Max (adjustable)
Speaker Output	Chime/Off/Alarm (selected by switch)

	CAT.	Qty 1+	Qty 4+	Qty 8+
Door Buzzer	LA-5188	\$34.95	\$31.45	\$27.90

### WEATHERPROOF COMMERCIAL GRADE INFRARED BEAM

A heavy duty version of the common beam sensor used in doorway annunciators, this commercial grade infrared beam is ideal for detecting when a person or object crosses a boundary or entrance way. Simply install the sensor module aligned with the reflector and the relay output will be triggered by any object which breaks the beam. The sensor module projects a modulated beam which resists interference from sunlight and can be used over a range up to 15m. Suitable for connection to existing lighting or security systems, and also compatible with the extension buzzer and counter add-on units for our standard doorway beam. The polycarbonate casing is weatherproof with an anti-fog sensor window making it suitable for use outdoors and in dusty or damp environments. LED indicators are included to assist with installation and provide a visual indication of the beam status.

- Adjustable vertical beam angle
- Narrow beam angle
- NC tamper switch output
- 12VDC plugpack required
- Terminal block and cable gland included

SPECIFICATIONS	LA-5179
Input Voltage	12 to 250V AC or DC
Sensing Range	0.25 to 15m
Enclosure Rating	IP66
Relay Output	NO / NC contact
Output Contact Rating	30VDC 1A
Sensor Module Dimensions	122(H) x 62(D) x 61(W)mm
Reflector Dimensions	82(Dia) x 8(H)mm



#### Optional Accessories:

Please note these require hard-wiring to achieve compatibility, see website PDF.

- LA-5188 Door Beam Extension Buzzer\*
- LA-5197 Door Beam Counter Module \*



\*Note: Accessories need to be hard wired.

	CAT.	Qty 1+	Qty 4+	Qty 8+
Infrared Beam	LA-5179	\$119.00	\$106.95	\$94.95
Extension Buzzer	LA-5188	\$34.95	\$31.45	\$27.90
Counter Module	LA-5197	\$49.95	\$44.95	\$39.95

### WIRELESS DRIVEWAY & ENTRY PIR ALERT KIT

Provides a useful alert to movement in a driveway or entryway. The PIR motion detection has an effective range of 4-8m, and can transmit to the indoor unit up to 80m away. Battery powered so there's no messy wiring, while intelligent design provides up to 2yrs of battery life. The indoor unit features a courteous chime, with high / low / off volume selection, as well as LED alert. Includes adjustable mounting bracket for the PIR unit for optimal positioning, and suitable mounting hardware. 6 x AA batteries required.

#### Features:

- Adjustable alarm volume
- DIY installation - battery powered
- 4-8m PIR distance
- Over 80m wireless transmission range



SPECIFICATIONS	LA-5178
Wireless Frequency	433.85MHz
Dimensions	Transmitter: 62(W) x 122(H) x 40(D)mm Receiver: 70(W) x 130(H) x 26(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
	LA-5178	\$34.95	\$30.95	\$27.95

## SECURITY LIGHTING

### SOLAR RECHARGEABLE SENSOR SPOTLIGHT

An all-in-one light, which turns on automatically at night when the built-in PIR detects movement. Set the light to illuminate for a short duration or continuously until manually turned off. During the day sunlight charges the solar panel on top of the light, so it's ready for use after the sun goes down. Easy to install, and feature an adjustable head to shine the light where you need it most.



SPECIFICATIONS	SL-3238
Lumens	250
Sensor	PIR
Motion Detective Distance	5m
Battery Type	1200mAh 4.5V Ni-MH battery included
Dimensions	210(L) x 210(W) x 140(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
Solar Rechargeable Spotlight	SL-3238	\$44.95	\$40.45	\$35.95



### RECHARGEABLE SOLAR SENSOR LIGHT

This rechargeable solar sensor acts as a deterrent against thieves with its security camera appearance. A fully self-contained unit with rechargeable battery and solar panel so it will always keep it charged.

Automatically turns on at night whenever movement is detected with the PIR sensor.

SPECIFICATIONS	SL-3239
Sensor Angle	0-70°
Solar Panel Input	1.6W
Solar Panel Output	5V, 300mA
Battery	3.7V, 2000mA



	CAT.	Qty 1+	Qty 5+	Qty 10+
300 Lumens	SL-3239	\$69.95	\$62.95	\$55.95

### NON-CONTACT INFRARED DOOR EXIT SWITCH

This infrared sensor can replace the old push button switch on automatic exit doors so that they will open with just a wave of your hand. The sensor will trigger an internal relay when your open hand comes within 100mm of the panel. No actual contact is required so there can be no transfer of contagions from one person to the next. The sensor is mounted on a stainless steel plate and has indicator LEDs built in to signal that the switch has been activated.

- 12VDC supply voltage
- 3A @ 30VDC contact rating relay
- 30mm sensor diameter
- 70 x 115mm plate dimensions



	CAT.	Qty 1+	Qty 2+	Qty 4+
Door Exit Switch	LA-5187	\$69.95	\$62.95	\$55.95

## RADIO FREQUENCY ID DEVICES (RFID)

### WATERPROOF DIGITAL KEYPAD WITH RFID ACCESS CONTROL

A single door multifunction standalone access controller or a Wiegand output keypad/card reader suitable for an area requiring stricter access control such as a laboratory, warehouse, bank, or prison. The unit is suitable for mounting indoor or outdoor in harsh environments. It's housed in a sturdy IP65 vandal proof zinc alloy electroplated case that can be mounted to a wall with minimal drilling. Up to 2,000 users are supported in either a card, a 4-8 digit PIN, or a card + PIN option and the inbuilt card reader supports EM, 125kHz frequency cards. Full installation instructions/wiring diagrams featured.

- Adjustable door output time, alarm time and door open time
- Built in buzzer

SPECIFICATIONS	LA-5353
Voltage	12VDC
Card Type	EM 125kHz
Card Reading	Distance: 3-6cm
Adjustable Door Relay Time	99 seconds
Adjustable Alarm Time	0-3 minutes
Wiegand Interface	Wiegand 26 bit
Wiring Connection	Electric Lock, Exit Button, DORL, External Alarm
Dimensions	128(H) x 82(W) x 28(D)mm



**1 YEAR WARRANTY**

	CAT.	Qty 1+	Qty 4+	Qty 8+
RFID Keypad	LA-5353	\$129.00	\$115.95	\$102.95

### RFID ACCESS CARD READER

With storage for up to 10,000 users and IP65 weatherproof housing, this is a robust standalone control system. An infrared remote control is included to provide straight forward access to configuration and card add/removal (also secured by PIN for management functions). 12V 3A relay control is provided for an electric lock mechanism, with inputs for an exit button, as well as door sensing. With minimal additional wiring you can easily add fail safe / fail secure functionality. Security features can be optionally enabled such as lockout and alarm on 10 failed swipes in 10-minutes, for additional security awareness.

- Waterproof IP65
- Supports proximity HID and EM (125kHz)
- Large capacity for up to 10,000 users.
- Supports adding 9999 cards with serial numbers



**NEW 2018**

	CAT.	Qty 1+	Qty 4+	Qty 8+
RFID Keypad	LA-5351	\$89.95	\$80.95	\$71.95

## DOOR STRIKES

### FAIL SECURE NARROW ELECTRIC DOOR STRIKE

Upgrade your conventional door locks to keyless entry electronic access. This electric door strike is suitable for narrower doors. A fail secure door strike will keep a door locked shut in the event of a power failure. Conversely, fail safe door strikes keep doors unlocked in the event of a power failure. This electric door strike complements our range of RFID controls for card or fingerprint access, or can also be paired with one of our intercoms or video doorphones to create a convenient remote door access system.

- Suitable for wood, aluminium and hollow metal door jambs
- Plate size: 160(L) x 25(W) x 28(H)mm
- Power: 12VDC, 450mA



**1 YEAR WARRANTY**

	CAT.	Qty 1+	Qty 4+	Qty 8+
Fail Secure Type	LA-5077	\$44.95	\$40.45	\$35.95

### STANDARD FAIL-SECURE DOOR STRIKE

Designed for use with cylindrical lock-sets (commonly used on wooden and aluminium doors).

- Dimensions: 150(L) x 39.5 (W) x 28(H)mm
- Zinc alloy face plate
- 12VDC 450mA (on striking)



**1 YEAR WARRANTY**

SEE WEBSITE FOR TECHNICAL DRAWING

	CAT.	Qty 1+	Qty 4+	Qty 8+
Fail Secure Type	LA-5078	\$49.95	\$44.90	\$39.90

### WI-FI RFID ACCESS KEYPAD

Open the door remotely by your Android or iOS® smartphone through this Wi-Fi access card reader. It can be connected to a door strike, exit button and external alarm to open doors and sound the alarm. Can be used as a standalone access card reader or controlled by an external access controller.

SPECIFICATIONS	LA-5358
Voltage	12-24VDC
Card Type	EM 125kHz / HID
Wiegand Interface	26 bit
Dimensions	125(H) x 83(W) x 22(D)mm



**NEW 2018**

	CAT.	Qty 1+	Qty 4+	Qty 8+
Wi-Fi RFID Access Keypad	LA-5358	\$249.00	\$219.00	\$199.00

### 4 DOOR RFID ACCESS CONTROLLER

This 4 way access controller can control up to 4 doors, 4 readers and 4 exit buttons. With in/out management and time & attendance, every user or employee can be tracked on the time they have used the access card. Perfect for large or small businesses with up to 20,000 users and permanent entry logging.

SPECIFICATIONS	LA-5359
User Capacity	20,000
Event Log	100,000 saved permanently
Wiegand Interface	26 bit
Dimensions	201(L) x 126(W) x 32(H)mm



**NEW 2018**

	CAT.	Qty 1+	Qty 4+	Qty 8+
4 Door RFID Access Controller	LA-5359	\$299.00	\$269.00	\$239.00

## RFID TAGS

- EM-4001 125kHz



### KEY FOB

Dimensions: 31(W) x 40(L) x 5(H)mm  
Cat. ZZ-8950



### WATER CARD

It is around the same size as a standard credit card.  
Cat. ZZ-8952



### LANYARD TYPE

Hangs on a lanyard or belt clip. Similar size to a credit card.  
Cat. ZZ-8953

	CAT.	Qty 1+	Qty 4+	Qty 8+
Keyfob	ZZ-8950	\$5.95	\$5.35	\$4.75
Wafer Card	ZZ-8952	\$4.95	\$4.45	\$3.90
Lanyard Card	ZZ-8953	\$4.95	\$4.45	\$3.90

## REMOTE CONTROLS

### SINGLE CHANNEL KEYFOB REMOTE

Multi-purpose remote control keyfob for garage doors, lights automatic gates etc. It operates in the 27MHz band on an FM signal. The built-in microcontroller uses the latest technology allowing for easy setup and installation while providing maximum security and reliability.

- Requires A554 battery
- Battery status LED
- Up to 200m range



For wireless remote controls see page 142

	CAT.	Qty 1+
Key Fob Remote	LR-8847	\$49.95

### ONE CHANNEL HAND CONTROLLER/TRANSMITTER

The most common remote garage door transmitter in use in Australia/New Zealand today. The single button controller operates on 27MHz and requires a 9V battery. The transmission is custom coded via a 10-way DIP-switch which is accessible from the battery cover and is matched to the receiver. Suitable for use with garage doors, security gates, and other equipment. This will save ordering one through the garage door people who charge a fortune for replacements.

- Weight: 72g excluding battery
- Dimensions: 96(H) x 55(W) x 20(D)mm



**SUITS GARAGE DOORS, MOTORISED GATES ETC**

**1 YEAR WARRANTY**

	CAT.	Qty 1+
Handheld Remote	LR-8827	\$64.95

## WIRELESS ALARM SYSTEMS

### 100 ZONE WI-FI ALARM KIT WITH APP

This 100 Zone Wi-Fi and cloud control Alarm system is very easy to install, and can be controlled easily via the touch screen, using a wireless key-fob or by your Smartphone. The PIR and Reed switches are mounted using 3M™ double sided tape. An ideal security system if you are renting or where it is difficult to run wiring through the premises. A Wi-Fi network is required.

- App controlled (suits Android and iOS®)
- Cloud enabled home-security system with full control from Smartphone
- Smart touch panel and easy to use
- Push notifications, Email alerts
- Dimensions: 163(W) x 132(L) x 30(D)mm

#### Kit Includes:

- 1 x Smart touch panel with rechargeable battery
- 1 x Wall/desk mount bracket with mounting hardware
- 1 x PIR motion sensor with magnetised mounting bracket & batteries
- 2 x Slim door/window sensors with batteries
- 1 x Wireless key fob remote with battery
- 1 x Mains adaptor



**RED SHIELD™**

**1 YEAR**

WARRANTY



View live footage on a Smartphone. Smartphone not included.

### ACCESSORIES TO SUIT 8 ZONE WI-FI ALARM KIT LA-5610

#### 720P WI-FI IP CAMERA

This is a 720p high definition wireless IP Camera that suits LA-5610 8 Zone Wi-Fi Alarm Kit with App. The camera features pan and tilt rotation with IR night vision LED's. It also supports mobile phone remote viewing and motion detection so that when the alarm is triggered it will send an alert to your phone and simultaneously brings up the camera footage live so that you can see what's happening!

- Dimensions: 125(H) x 100(W) x 95(L)mm  
CAT. LA-5620
- Dimensions: 125(H) x 100(W) x 95(L)mm  
CAT. LA-5620



#### SPARE WIRELESS KEY FOB REMOTE

Compact remote control for the Wi-Fi Alarm. This 5 buttons remote features 3 modes and a socket function to turn the home appliance ON and OFF. It has an excellent transmission range. CR2032 Lithium battery is included.

- Power: 1 x CR2032 Lithium battery included
- Dimensions: 55(L) x 37(W) x 9(D)mm  
CAT. LA-5618



#### FLOOD SENSOR TO SUIT LA-5610 WI-FI ALARM

Triggered when water reaches the sensor, ideal for monitoring potential flood areas such as a laundry, basement, bathroom etc. Can also be used to alert when you're topping up your pool etc. Single AAA battery, adhesive mounting strips included.

CAT. LA-5615



SPECIFICATIONS	LA-5615
Battery	1 x AAA (Included)
Weight	22g
Cable Length	240mm
Dimensions	Main Unit: 21(W) x 72(H) x 20(D)mm, Sensor: 25(W) x 15(H) x 10(D)mm

#### SPARE WIRELESS PIR SENSOR

Will alert wireless home alarm when movement is detected. It is ideal for wide spaces such as rooms, hallways, stairwells, sheds, front and back doors. Features power-saving with 3 minutes motion lockout after each detection to preserve battery life. It has 120 degree wide angle detection and features low battery warning. It comes with a PIR motion sensor, all-directional magnetic mounting bracket, which can be mounted using the supplied 3M®doublesided tape or included mounting screws.

- Power: Includes 1 x CR123A Lithium battery
- Dimensions: 65(L) x 49(W) x 36(D)mm  
CAT. LA-5614



#### WIRELESS EXTERNAL SIREN STROBE

Add an external siren to alert your neighbours and scare would-be thieves.

- Siren: 120dB
- Battery: Requires 4 x D size
- Dimensions: 260(L) x 250(W) x 50(D)mm  
CAT. LA-5619



#### SHOCK SENSOR TO SUIT LA-5610 WI-FI ALARM

Triggered by glass breaking, a door being smashed, or any other shock force. Includes mounting adhesive and battery.

CAT. LA-5617



SPECIFICATIONS	LA-5617
Battery	1 x AAA (Included)
Weight	26g
Cable Length	280mm
Dimensions	Main Unit: 21(W) x 76(H) x 20(D)mm, Sensor: 35(W) x 35(H) x 6(D)mm

\*Note: Not stocked in all stores but can be ordered.



#### SPARE WIRELESS REED SWITCH

Will alert the wireless home alarm when a door or window is opened. Ideal to use on windows and doors of your garages, cabinets, sheds, attics, side doors and freezers. It has magnetic sensor that can be mounted on right or left side of door or window. Features low battery warning. It comes with a window sensor and a double-sided tape.

- Power: 2 x AAA batteries included
- Dimensions: 75(L) x 20(W) x 20(D)mm  
CAT. LA-5616



#### GARAGE DOOR SENSOR TO SUIT LA-5610 WI-FI ALARM

Provides reed switch functionality with enough flexibility for easy mounting onto a garage door. Uses a single AAA battery, includes adhesive mounting strips.

CAT. LA-5613



SPECIFICATIONS	LA-5613
Battery	1 x AAA (Included)
Weight	32g
Cable Length	290mm
Dimensions	Main Unit: 21(W) x 76(H) x 20(D)mm, Sensor: 11(W) x 50(H) x 12(D)mm

#### TEMPERATURE SENSOR FOR LA-5610 WI-FI ALARM

Extremely versatile. Monitors temperature, with a huge array of applications. Great for the wine cellar, dog's kennel, baby's room, and more. Includes adhesive mounting strips & battery.

CAT. LA-5621







SPECIFICATIONS	LA-5621
Battery	2 x AAA (Included)
Weight	50g
Cable Length	120mm (Coiled)
Dimensions	Main Unit: 28(D) x 67(Dia.)mm, Sensor: 6(D) x 29(Dia.)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
100 Zone Wi-Fi Alarm Kit	LA-5610	\$299.00	\$269.00	\$239.00
<b>ACCESSORIES TO SUIT LA-5610 WI-FI ALARM</b>				
Wi-Fi IP Camera to Suit	LA-5620	\$149.00	\$133.95	\$118.95
Spare PIR - Wireless	LA-5614	\$39.95	\$35.90	\$31.90
Spare Reed Switch - Wireless	LA-5616	\$29.95	\$26.95	\$23.70
Spare Keyfob	LA-5618	\$29.95	\$26.95	\$23.70
Bell Box Siren	LA-5619	\$99.95	\$89.95	\$79.95
Garage Door Sensor*	LA-5613	\$69.95	\$62.95	\$55.95
Flood Sensor*	LA-5615	\$69.95	\$62.95	\$55.95
Shock Sensor*	LA-5617	\$69.95	\$62.95	\$55.95
Temperature Sensor*	LA-5621	\$79.95		



## Select Your Model: Alarm Systems

		Connection	Frequency	Zones	App Controlled	Self-Install	Page
	LA-5610	Wi-Fi	2.4GHz	100	•		288
	LA-5282	Wireless	433MHz	8			289
	LA-5284	Wireless	433MHz	8			289

### MINI WIRELESS ALARM KIT

Installation is made easy using wireless connectivity, so there's no messy cables to run. All sensors are wirelessly connected, and the unit features a super-loud 120dB siren which is also the base station, which includes a small strobe. Activation is with a keyfob remote control. You can easily cover a greater area by adding more sensors to windows and doors or install PIR motion detectors too. Kit includes siren, one motion detector, one door/window sensor, and a keyfob remote. There's also a security sticker for an added deterrent!

- Wireless connection of all components
- Quick and easy installation
- Ideal for home or office
- Easily expanded to cover a greater area



SPECIFICATIONS	LA-5282
<b>Siren Rated</b>	120dB
<b>Batteries</b>	Main Siren: 3 x AA (Not included) Motion Sensor: 1 x CR123A (Included) Door/Window Sensor: 2 x AAA (Included) Key Fob Remote Control: 1 x 12V (Included)
<b>Dimensions</b>	Main Siren: 105(H) x 67(W) x 33(D)mm Motion Sensor: 66(H) x 64(D) x 53(W)mm (Including mounting bracket) Door/Window Sensor: 89(H) x 42(W) x 16(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
Mini Wireless Alarm Kit	LA-5282	\$89.95	\$80.95	\$71.95

ACCESSORIES TO SUIT	CAT.	Qty 1+	Qty 2+	Qty 4+
Additional Window/Door Sensor	LA-5285	\$32.95	\$28.95	\$25.95
Additional Motion Sensor/PIR	LA-5287	\$39.95	\$35.95	\$31.95

See page 279 for Video Surveillance deterrent stickers

### 720P WI-FI IP CAMERA TO SUIT LA-5282/84

This brilliant camera extends the functionality of your compatible alarm system by providing motion detection triggering, and pan / tilt functionality. It provides high quality 720p video, and includes infrared night vision. The camera can also work as a standalone unit, recording to an SD card. You can view / review footage via an iOS / Android app, with email and push notifications available too. Compatible with LA-5282/84 alarm systems. Includes power supply and mounting hardware.

- Smartphone App Controlled
- Pan & Tilt
- Night vision



	CAT.	Qty 1+	Qty 2+	Qty 4+
720p Wi-Fi IP Camera	LA-5289	\$149.00	\$133.95	\$118.95

### 8 ZONE WIRELESS ALARM KIT

Installation is made easy using wireless connectivity, so there's no messy cables to run. All sensors are wirelessly connected, and the unit features a super-loud 120dB siren inside the base station. Activation is via the keypad on the base station or the supplied keyfob remote control. You can easily cover a greater area by adding more sensors to windows and doors or install extra PIR motion detectors. Kit includes base station, one motion detector, one door/window sensor, and a keyfob remote.

- Ideal for home or office
- Pre-programmed for easy installation
- 120dB siren
- Can be expanded
- 8 pre-set zones
- Remote control has Panic feature



SPECIFICATIONS	LA-5284
<b>Batteries</b>	LCD Smart Panel: 1 x 9V (Not Included) Motion Sensor: 1 x CR123A (Not Included) Door/Window Sensor: 2 x AAA (Not Included) Key Fob Remote Control: 1 x 12V (Included) Power: 9.5V @ 500mA (LCD Smart Panel)
<b>Weight</b>	LCD Smart Panel: 227g (Excluding Battery) Motion Sensor: 47g (Excluding Battery) Door/Window Sensor: 40g (Excluding Batteries) Key Fob Remote Control: 20g (Including Battery)
<b>Dimensions</b>	LCD Smart Panel: 154(W) x 113(H) x 33(D)mm Motion Sensor: 67(H) x 58(D) x 51(W)mm Door/Window Sensor: 88(H) x 53(W) x 11(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
8 Zone Wireless Alarm Kit	LA-5284	\$129.00	\$115.95	\$102.95
Spare Wireless Keyfob Remote	LA-5149	\$29.95	\$26.95	\$23.95
Wireless Siren & Strobe	LA-5159	\$99.95	\$89.95	\$79.95
Wireless Indoor 120dB Siren	LA-5142	\$39.95	\$35.90	\$31.90

### LARGE ALARM STICKER

For trucks, caravans, houses, offices and factories. Where a larger and more prominent deterrent sticker is required. Sticks to outside of window.



	CAT.	Qty 1+	Qty 3+	Qty 6+
120 x 80mm	LA-5102	\$2.95	\$2.60	\$2.30



## ALARM ACCESSORIES

### QUAD ELEMENT PIR DETECTORS

Reliable and effective quad element PIR detectors for home or office security applications. Compact, attractive and easy to install with the features to match. It has a built-in automatic temperature compensation to help eliminate false triggers in certain environments. 110 degree convex honey comb hemispherical infrared lenses are used and has an extremely low current draw at 8mA. Features a swivel bracket for quick position adjustment.

- Detection type: Quad element low noise pyroelectric sensor
- LED indicator: Walk test enabled by internal link
- Tamper switch



SPECIFICATIONS	LA-5046
Operating Voltage	9-15VDC
Current Draw	8mA nominal at 12VDC
Range	12m max
Field Of View	110 degrees max
Mounting Height	1.5m-2.4m
Alarm Output	NC, when cover on, 28VDC 0.1A
Warm Up Period	90 seconds
Pulse Count	1, 2 and 4 pulses selectable
Dimensions	104(H) x 66(W) x 47(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 8+
Quad	LA-5046	\$39.95	\$35.95	\$31.95

### ALARM RELAY MODULE 2 X 15A

When it comes to large alarm installations, there is often a requirement to have several sirens and strobe lights. In order to do this safely, the best way is to use an isolated relay module. This enables you to supply an external power source so as not to overload the power supply on the alarm panel and switch high currents to multiple sirens and strobe lights.

- 15A Switching current
- NO and NC contacts
- Isolated to protect the alarm panel
- Relay coil protection for spike free operation



	CAT.	Qty 1+	Qty 4+	Qty 8+
	LA-5558	\$24.95	\$22.45	\$19.95

## REED SWITCH MAGNET ASSEMBLIES

### NC REED SWITCH\*

Ideal for burglar alarms.  
\*Normally open, but closed when near magnet (see note below).



SPECIFICATIONS	SM-1002
Total Length	44mm
Glass Length	16mm
Contact Rating	10W
Switching Voltage	200VDC (max)
Switching Current	0.5A (max)
Carrying Current	1.0A (max)

	CAT.	Qty 1+	Qty 10+	Qty 25+
Reed Switch	SM-1002	\$1.95	\$1.75	\$1.55

### NC REED SWITCH & MAGNET

These are used to secure an alarm circuit on a door or window. Sold as a pair, one has a magnet inside, the other a reed switch. They have powerful magnets, with self adhesive or screw mount. Screw terminating. Size same as LA-5070. Contacts open when magnets are apart and closed when together.



	CAT.	Qty 1+	Qty 4+	Qty 8+
Reed Switch	LA-5072	\$4.95	\$4.45	\$3.90

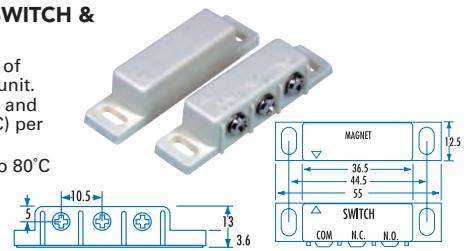
## Tech Talk: Normally Closed

Normally CLOSED (NC) per pair. Burglar Alarm Industry Standard

### NO & NC REED SWITCH & MAGNET

You have both types of contacts on the one unit. Normally Open (NO) and Normally Closed (NC) per pair.

Temperature: -40°C to 80°C



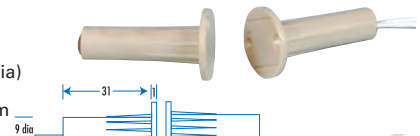
	CAT.	Qty 1+	Qty 4+	Qty 8+
Reed Switch	LA-5070	\$5.95	\$5.25	\$4.75

### FLUSH MOUNT REED SWITCH & MAGNET SETS

Just drill a recess in your door or window and the magnet flush mounts to be "invisible". The reed switch segment is similarly mounted into the door frame or window frame & wired into your system. Available in two versions to suit timber or metal frames with both versions normally closed contact.

#### TAPERED VERSION TO SUIT TIMBER FRAMES

- Dimensions: 31(L) x 9(Dia) mm
- Surface Diameter: 19mm



#### TOOTHED VERSION TO SUIT METAL FRAMES

- Dimensions: 19(L) x 19(Dia)mm
- Surface Diameter: 24mm



**NORMALLY CLOSED (NC) PER PAIR**

	CAT.	Qty 1+	Qty 4+	Qty 8+
For Timber Frame	LA-5075	\$4.95	\$4.45	\$3.90
For Metal Frame	LA-5076	\$5.95	\$5.25	\$4.75

### NC MINIATURE REED SWITCH & MAGNET

Absolutely tiny, these encapsulated reed/magnet switches with leads are ideal for home and car security. Their size should make them extremely easy to conceal so that potential thieves are less likely to disable them. Made from moulded plastic.

- White in colour.
- Supplied with 300mm lead
- Dimensions: 33(L) x 8(W) x 8.5(D)mm
- Width including mounting tab: 15mm
- Hole spacing: 18mm
- Wire lead length: 300mm



**NORMALLY CLOSED (NC) PER PAIR**

	CAT.	Qty 1+	Qty 4+	Qty 8+
Mini Reed Switch	LA-5074	\$6.95	\$6.25	\$5.50

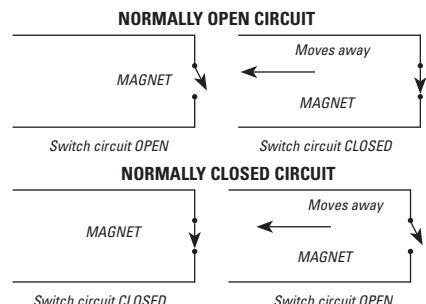


## Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!

## Tech Talk: Normally Open & Closed Circuits

This is when the switch contacts are touching in the presence of a switching magnet. The contacts OPEN when the magnet is removed. This is the most common system in alarm circuits.



## ALARM STROBES

### BLUE 12V SIREN/STROBE

A combined siren and LED strobe for alarm systems. It has 120dB output with low power consumption.

- Output: 120dB
- Operating voltage: 12VDC
- Dimensions: 120(L) x 72(W) x 42(H)mm



CAT.	Qty 1+	Qty 4+	Qty 8+
LA-5306	\$16.95	\$15.25	\$13.55

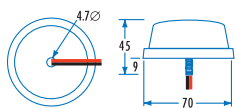
## Tech Talk: Aircraft Owners/Operators

If you operate mobile equipment on the aircraft side of an airport you must fit an amber flashing light on such equipment. Save yourself a fine & wire an amber unit to your vehicle. All units are 12V powered. Simply wire across ignition circuit so that strobe automatically comes on when vehicle is started.

### MINI SIZE - LED

LED strobes for security, alarm or emergency use. Low current consumption units are fully sealed and waterproof; suitable for outdoor alarm applications. Mounts with 2 x 5mm bolts.

- 12VDC operation
- Dimensions: 70(Dia) x 45(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 8+
Blue	LA-5326	\$19.95	\$17.70	\$15.70
Red	LA-5327	\$19.95	\$17.70	\$15.70
Amber	LA-5328	\$19.95	\$17.70	\$15.70

## ALARM SIRENS

### SMALL 'TWEETIE PIE' SIREN

This incredible little piezo 'tweetie pie' screamer emits a 105dB wail. The sound at close range is almost unbearable, ideal for any compact high noise alarm application.

- Current 200mA max
- Measures 57(L) x 33(H) mm - less bracket
- Operating voltage: 12VDC



CAT.	Qty 1+	Qty 4+	Qty 8+
LA-5255	\$19.95	\$17.95	\$15.95

### LARGE 'TWEETIE PIE' SIREN

This piezo screamer is the original Tweetie Pie's big brother. It is ideal if space is not too much of a problem, but it's still far smaller than all our other sirens. This screamer is louder than the smaller Tweetie Pie, it's 119dB and draws only 250mA.

- Colour is black
- Measures 90(L) x 62(W) x 70(H)mm incl. mounting bracket
- Operating voltage: 12VDC



CAT.	Qty 1+	Qty 4+	Qty 8+
LA-5254	\$24.95	\$22.35	\$19.70

### PIEZO SIREN

This piezo screamer emits a 105dB wail, the sound at close range is almost unbearable. Ideal for any compact high noise alarm application. Supplied with mounting bracket and connecting cable.

- Height 100mm (from mounting bracket to top)
- Length 80mm, 80mm diameter.
- Operating Voltage: 12VDC
- Resonant Freq: 3kHz
- Sound Output: 120dB
- Current Drain: 300mA



CAT.	Qty 1+	Qty 4+	Qty 8+
LA-5258	\$24.95	\$22.35	\$19.70

### INDOOR PIEZO SIREN

This unit is very popular for indoor use with house alarms. It is dustproof & waterproof.

- Voltage range: 7.5 to 15V
- Current (approx): 200mA @12V
- Output: 100-105dB @ 1m
- Dimensions: 85(Base) x 42(H)mm



CAT.	Qty 1+	Qty 4+	Qty 8+
LA-5256	\$9.95	\$8.75	\$7.75

### PLASTIC SIREN COVER

RUSTPROOF & UV STABILISED - Remains attractive in any environment. Accepts 5" siren, has 3 holes drilled for strobe & tamper switch bracket.

- 5 year warranty for UV protection
- 175 x 155mm at back / 125 x 125mm at front
- Depth 145mm
- White in colour
- Includes tamper switch



CAT.	Qty 1+	Qty 4+	Qty 8+
LA-5112	\$24.95	\$22.35	\$19.70

### 5" HORN SPEAKER

Fully weatherproof. Unique voice coil construction ensures high dependability on full drive.

- Suitable for PA, intercom, security systems, etc
- 10 watt - 8 ohm



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3180	\$16.95	\$14.95	\$13.35

### 5" X 8" HORN SPEAKER

This attractive unit in high impact white plastic features stainless steel hinge bolts. The special bracket enables maximum flexibility in mounting. Ideal for any outdoor application including marine.

- Rated at 30 watts power handling
- 8 ohm



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3190	\$39.95	\$35.90	\$31.90

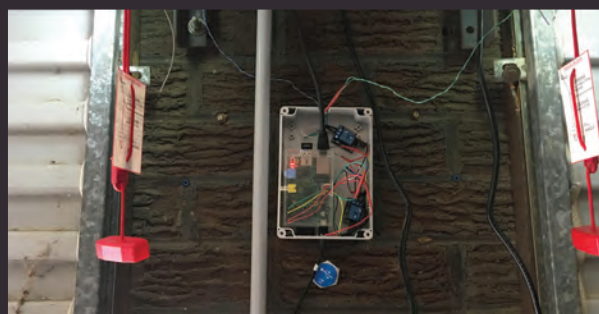
### PIEZO 4 TONE SIREN WITH CONTROLLER

A very loud 125dB siren, it has four different tones - police, ambulance, fire engine or truck air horn. Connects to a 12VDC power source and select a tone with the controller. Sturdy moulded plastic construction with metal mounting bracket.

- 125dB
- 12VDC
- Dimensions: 150(L) x 130(Dia)mm



CAT.	Qty 1+	Qty 4+	Qty 8+
LA-5259	\$29.95	\$26.90	\$23.70



## Smart Hardware Competition: - MIKE HIRT, SHOPS AT JAYCAR BELCONNEN

"I connected my garage door openers to a raspberry pi and using open source node.js to integrate with Apple HomeKit so I can operate them with my phone and watch."





## STANDALONE ALARMS

### MOTION ACTIVATED ALARM WITH REMOTE CONTROL

Avoid messy wiring and protect your belongings with ease using our battery operated, motion activated alarm. The PIR sensor provides 120° coverage, triggering a 120dB+ alarm when breached. Use the remote control to arm or disarm the alarm. Flick the switch to chime and be notified as people enter or leave your room. It is a simple but effective deterrent against intruders.

- Remote control to arm or disarm the alarm unit
- A delay feature to give you time to leave the room
- 120dB+ alarm
- 120° coverage
- Easy to install mounting bracket
- The alarm unit requires 3 x AA batteries
- The remote control includes 1 x CR2032 battery
- PIR Sensor Dimension: approx. 114(L) x 61(W) x 29(D)mm
- Remote Dimension: approx. 64(L) x 32(W) x 7(D)mm



**RED SHIELD™** 1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
Motion Activated Alarm	LA-5217	\$34.95	\$31.45	\$27.90

### WINDOW & DOOR SENSOR ALARM

This is a fully self-contained audible alarm for use on doors and windows. Installed in seconds using the provided self-adhesive strips, one part on the door or window, and one part on the door frame or wall adjacent. It can be set to chime for entry alert, or as a siren for security. Also available in a pack of two, LA-5209.

- Batteries: 4 x LR44 batteries included
- Dimensions: Sensor: 33(W) x 62(H) x 15(D)mm, Contact: 10(W) x 62(H) x 15(D)mm



**RED SHIELD™** 1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
Each	LA-5207	\$9.95	\$8.95	\$7.95
Twin Pack	LA-5209	\$17.95	\$15.95	\$13.95

### CEILING MOUNT ALARM WITH REMOTE CONTROL

A dual purpose unit that can be used as a simple entry chime, or as a self contained alarm system. Installation takes just minutes and being battery operated, blackouts won't be a problem. It detects movement via a passive infra-red sensor and the ear piercing 110dB siren means that everyone will know if there is an intruder. A remote control is included so you won't have to climb a ladder to turn it on and off!



SPECIFICATIONS	LA-5215
Power	3 x AA batteries
Typical Battery Life	6 months
Pir Range	>3m
Siren Duration	30 seconds
Entry Delay	30 seconds
Remote Range	>6m

**RED SHIELD™** 1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
Movement Activated	LA-5215	\$39.95	\$35.90	\$31.90

### Automatic Account:

For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.

### PRESSURE ACTIVATED MAT ALARM WITH SIREN & STROBE

Easy to install and maintain, simply slide the pressure sensitive pad under your door mat to be notified of guests when they arrive at your front door or to surprise and deter would-be intruders. The alarm unit is battery operated and supplied with a mounting bracket. Flick the switch to chime when you are at home, flick it to alarm when you are away.

- Super loud 120dB+ siren
- Red strobe light
- Toggle switch, off/chime/alarm
- Requires 1 x 9V Alkaline Battery (not included)
- Lead length: 4m
- Mat dimensions: approx. 488(L) x 331(W)mm
- Buzzer dimensions (without bracket): approx. 97(L) x 54(W) x 33(D)mm



**RED SHIELD™** 1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
Pressure Alarm	LA-5218	\$34.95	\$31.45	\$27.90

## PANIC ALARMS

### PERSONAL DUAL ALARM WITH LED TORCH - 130DB

Deter thieves and attackers with its loud dual 130dB sirens and powerful independent torch function which will strobe when the alarm is activated. Simply pull the rip-cord to pull out the pin. Replace the pin to deactivate the alarm. Also includes a LED light. Fantastic for travellers.

- Traditional ripcord or key chain activation
- Includes 4 x LR44 batteries
- Dimensions: 105(L) x 28(W) x 15(H)mm

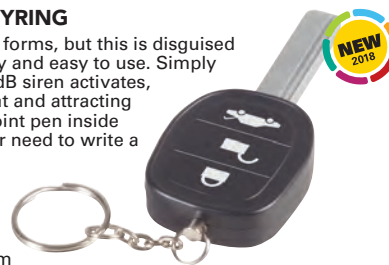


	CAT.	Qty 1+	Qty 4+	Qty 8+
Personal Alarm	LA-5181	\$14.95	\$13.35	\$11.70

### PERSONAL ALARM KEYRING

Personal alarms take many forms, but this is disguised as an inconspicuous car key and easy to use. Simply pull the pin and a loud 100dB siren activates, distracting a potential threat and attracting attention. Includes a ball point pen inside the tip of the key if you ever need to write a quick note.

- Siren: 100dB
- Battery: 4 x LR41 (Included)
- Dimensions: 190(H) x 130(W) x 12(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 8+
Personal Alarm Keyring	LA-5175	\$12.95	\$11.45	\$9.95

### 100DB RED MINI PERSONAL ALARM WITH TORCH

Attaches to your handbag, backpack or keychain. In vulnerable or threatening situations simply pull the keychain to activate the powerful 100dB alarm (Turn off by re-inserting the pin). Also includes a handy LED light, pushbutton activated. Red in colour.

- Key chain activation
- 100dB loud siren
- Includes 3 x LR44 batteries
- Dimensions: 60(L) x 40(W) x 20(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 8+
100dB Red Mini Personal Alarm	LA-5141	\$9.95	\$8.95	\$7.95

## Addicted to Social? We're Here to Chat!



facebook.com/jaycarelectronics



instagram.com/jaycar\_electronics



twitter.com/jaycarau



youtube.com/user/JaycarVideo

## Home Automation - Economy Range:

- 16 sector wireless alarm system
- 16 sector wireless home automation devices
- Timer schedule programming
- Group programming
- Matrix (Scenes) programming
- 100 Alarm event memory

**1YR WARRANTY ON ALL  
PRODUCTS IN THIS RANGE**

SPECIFICATIONS	LA-5592
Voltage Input	12VDC
Wireless Range	100m line of sight
Wireless Frequency	433MHz



**SEE OUR WEBSITE FOR  
FULL DETAILS AND  
SPECIFICATIONS ON THE  
ENTIRE RANGE**



	CAT.	Qty 1+	Qty 2+	Qty 4+
Main Controller	LA-5592	\$99.95	\$89.95	\$79.95

### ✓ ECONOMY RANGE - ACCESSORIES THESE SUIT OUR LA-5592 MAIN CONTROLLER SHOWN ABOVE

#### 240VAC MAINS SWITCH CONTROLLER MODULE FOR LA-5592

A compact wireless 240VAC Mains switch module to interface with our Home Automation Controller. Designed to be hard wired to your GPO, wall switches or other mains device, it enable you to remotely activate any mains appliances. Turn lights on and off, motors, heaters via the home automation main controller and input devices such as PIR, Reed Switch, key fob remotes and light sensors.

*Note: A licensed electrician is highly recommended*



	CAT.	Qty 1+	Qty 2+	Qty 4+
	LA-5594	\$34.95	\$30.95	\$27.95

#### 12VDC SWITCH CONTROLLER MODULE FOR LA-5592

This controller module is good for switching 12V devices such as lamps, cameras, doors and garage roller doors. Control wireless via the LA-5592 Main Controller via Time schedule, manual and Matrix or pair with the LA-5155 Key Fob Remote Control for use as a wireless switch.



	CAT.	Qty 1+	Qty 2+	Qty 4+
12V Switch Controller	LA-5595	\$44.95	\$39.95	\$35.95

#### WIRELESS PIR SOLAR LIGHT SENSOR FOR LA-5592

Automated light triggering is a simple yet effective security feature for homes. This kit comes with an extremely bright LED attached to a wall or roof mountable PIR sensor. The PIR sensitivity can be adjusted across a range from day to night and the light mode can be switched between flashing mode, on for 20 seconds, on for 50 seconds, or off completely. An internal 6.0V Ni-MH battery pack can be recharged with the supplied amorphous solar panel.

- LED on/off indicator



	CAT.	Qty 1+
Wireless Solar PIR	LA-5599	\$99.95

#### WIRELESS INFRARED CONTROLLER FOR LA-5592

A learning infrared controller designed to mount on the roof to directly control your household appliances. It will learn your appliances infrared remote command and repeat when matched with a home automation input device. Turn on or off your air conditioner and television; open your curtains, etc. The infrared LED's are clustered in a 360 degree formation and will operate devices up to 150m<sup>2</sup> in size. Unit is supplied with a mains power supply.



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless IR Controller	LA-5597	\$69.95	\$62.95	\$55.95

#### WIRELESS SOLAR DOORWAY BEAM FOR LA-5592

Pair this with our Home Automation Controller (LA-5592) to add an entry warning system to doorways, garages, driveways or hallways. This device is coupled with an amorphous solar panel to keep the doorway beams 4.8V Ni-MH battery pack charged, no need to worry about swapping out batteries or connecting up mains wiring.

It will detect an interruption to the beam at up to 6m away which will trigger a warning on the main home automation controller. An ideal way to keep your entryways monitored.

- 4 x 500mAh 4.8V Ni-MH battery back



	CAT.	Qty 1+
Wireless Solar Doorbell	LA-5593	\$54.95

#### 240VAC MAINS LIGHT DIMMER MODULE FOR LA-5592

This compact 240VAC Mains Light Dimmer module remotely controls the intensity of your 240VAC lamps. It has 8 steps of light dimming, perfect for light mood setting when entertaining guests. Unit is only suitable for incandescent type bulbs.

*Note: A licensed electrician is highly recommended to hard wire this device into 240V mains wiring.*



	CAT.	Qty 1+
240VAC Dimmer	LA-5596	\$34.95

#### WIRELESS BELL BOX FOR LA-5592

A wireless bell box designed to interface with the LA-5592 Home Automation Controller. Works as an audible and visual deterrent, the siren produces a wailing 94dB of output and a powerful strobe when alarm is activated. It is supplied with 240VAC mains power adaptor.



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless Bell Box	LA-5579	\$89.95	\$80.95	\$71.95

#### WIRELESS LIGHT SENSOR MODULE FOR LA-5592

This light sensor module will interface with the Home Automation system to turn an output device on or off. It has an adjustable light setting to detect the desired ambient light trigger. You can interface this with a 240V mains controller to turn a light on at dusk or a 12V controller to open the curtains at the first sign of light.



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless Light Sensor	LA-5598	\$29.95	\$26.95	\$23.95

## Home Automation - Premium Range:

This is a term where digital technology is used to simplify or integrate aspects of home management. Most home automation is designed to combine previously separate tasks into a central command & control workstation, typically a touch screen or even just a keypad. A PC can also form part of such a system. Typical tasks that home automation can integrate are: interior & exterior lighting, air conditioning, audio & video feeds, telephone management, along with integration of home security including keyless entry, etc. Previously home automation was limited to large expensive homes. Up until now home automation components were hard wired inside walls using Cat5-type cabling.

It is now possible to achieve the same thing without expensive & disruptive cabling using high security, high reliability wireless technology.

We are proud to be the pioneer of Home Automation-in-a-box technology.



Control using a Smartphone.  
*Smartphone not included.*

SEE OUR WEBSITE FOR  
FULL DETAILS AND  
SPECIFICATIONS ON THE  
ENTIRE RANGE



LA-5572



LA-5570



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless Gateway	LA-5570	\$189.00	\$169.95	\$150.95
Keypad Control	LA-5572	\$129.00	\$115.95	\$102.95

### ✓ PREMIUM RANGE - ACCESSORIES THESE SUIT OUR LA-5570 MAIN CONTROLLER SHOWN ABOVE

#### WIRELESS MAINS CONTROLLER

A 240VAC plug in mains controller that is able to remotely activate any mains appliances. Turn lights on and off, motors, heaters, etc wirelessly via the Gateway or remote control devices.



	CAT.	Qty 1+	Qty 2+	Qty 4+
240VAC Wireless Controller	LA-5578	\$79.95	\$71.95	\$63.95

#### WIRELESS RELAY SWITCH

Wireless relay switch which supports two D.I. (digital input) and two D.O. (digital output) interfaces. It supports bi-directional communication that allows you to receive or transmit signal with 3rd-party device by itself or interact with other UIS wireless devices.

- Features LED indicators for inputs and outputs, and screw terminals for easy wiring
- Power supply included



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless Relay Switch	LA-5577	\$99.95	\$89.95	\$79.95

#### WIRELESS 12VDC SWITCH CONTROLLER

A 12VDC Controller switch suitable for use with Garage doors and door strikes. It can also be used for switching other devices with a 12VDC control input such as lamps, cameras, etc. It has a magnet on the rear which enables easy fixture to metal surfaces.

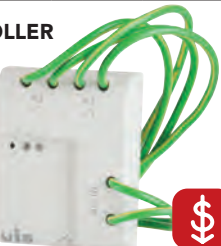


	CAT.	Qty 1+	Qty 2+	Qty 4+
12VDC Wireless Switch	LA-5580	\$39.95	\$35.95	\$31.95

#### WIRELESS 240VAC LIGHTING CONTROLLER

Essentially a remote control relay that will allow control of up to two lights wirelessly. Plug it into a 230VAC source (or you can wire it in) then connect up to 2 lights and they can be remotely controlled.

- Not limited to lights, it could be used for switching any number of household devices



	CAT.	Qty 1+	Qty 2+	Qty 4+
240VAC Wireless Light Controller	LA-5575	\$54.95	\$48.95	\$43.95

#### WIRELESS PIR SENSOR

Our new range of Home Automation products also integrates alarm monitoring functionality. This Wireless PIR sensor further expands the capabilities of our Home Automation range by offering reliable motion detection. Like all PIR detectors, this unit detect infra-red radiation in 95° up to a distance of 5 metres. Uses 2 x AA batteries and has energy saving mode.



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless PIR	LA-5582	\$59.95	\$53.95	\$47.95

#### WIRELESS MAGNETIC REED SWITCH

This compact wireless reed switch interfaces with our Home Automation system allowing entry protection from windows and doors. Supplied with a mounting bracket for the main wireless switch, the magnet screws onto door or window frames. Also has power saving mode which enables the battery to last up to 2 years.



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless Reed Switch	LA-5584	\$44.95	\$39.95	\$35.95

#### WIRELESS SIREN

A 240V AC plug in siren designed to receive signals from our range of Home Automation sensors. Unit can interface with wireless PIR detectors, reed switches and smoke detectors. Has a sound output of 85dB and also an LED visual indication on the front panel.



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless Siren	LA-5576	\$59.95	\$53.95	\$47.95

#### REMOTE CONTROL

Miniature and slim line 3 button key fob remote control for use with our range of Home Automation devices. Quickly arm and disarm sensors, turn on lights, open doors and also integrates a panic button for emergencies. Buttons, arm, disarm and panic



	CAT.	Qty 1+	Qty 2+	Qty 4+
Remote Control	LA-5573	\$39.95	\$35.95	\$31.95



## Event Recorders - Dash Cameras:

A lot of the spectacular video seen on the TV News comes these days from devices called Event Recorders. They can be attached to the windscreen of your car, in a shop (acting as a security camera) or even in a bushland setting to record animal or intruder activity. They offer quality

pictures & draw very little power. They can be movement triggered or not. They have really changed the way we live in the world, as you never know when you are being electronically observed these days. Jaycar has a great range to suit every application & budget

### Select Your Model: Event Recorders



	QV-3845	QV-3847	QV-3858	QV-3870	QV-3865
<b>LCD Screen Size</b>	2.0"	2.7"	2.7"	N/A	1.2"
<b>Video Resolution</b>	1080p	1080p	1080p	1296p	1080p
<b>Camera Resolution</b>	3MP	2MP	12MP	3MP	3MP
<b>Lens Angle</b>	140°	120°	170°	122°	120°
<b>GPS Function</b>			•	•	•
<b>G Sensor</b>	•	•	•	•	•
<b>App Connect</b>					•
<b>Internal Battery</b>	•	•	•	•	•
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#### 1080P 2 INCH CAR DASH CAMERA

This unit is packed full of features with its unobtrusive size and full 1080p camera. The integrated 2" LCD provides you with playback and control functionality while the strong suction cup mount holds it firmly to your windscreen. Recording can be triggered manually or by loop recording which will overwrite the footage once the microSD card is full. Its suitable with use with cars and trucks with the included 12-24VDC cigarette lighter power supply. Supports microSD cards up to 32GB, while the wide 140° lens provides maximum view. Includes suction cup mount, car cigarette lighter charger and USB cable.

- G-Sensor. Manual & Loop Recording
- Parking Mode. Wide 140° Lens
- Auto Power On Recording
- 12/24VDC Operation
- In-Built Mic & Speaker



WARRANTY



SPECIFICATIONS	QV-3845
<b>LCD Screen Size</b>	2"
<b>Video Resolution</b>	Up to 1080p
<b>Camera Resolution</b>	3MP
<b>Lens Angle</b>	140°
<b>Video Compression</b>	MJPEG
<b>Video File Format</b>	AVI
<b>Storage</b>	Up to 32GB microSD
<b>Battery</b>	Li-ion 3.7V, 180mAh
<b>Power</b>	5VDC/1.5A
<b>Car Charger</b>	12-36VDC
<b>Dimensions</b>	53(H) x 49(W) x 35(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p 2 Inch Car Dash Camera	QV-3845	\$79.95	\$71.95	\$63.95

#### 1080P 2.7 INCH DASH CAMERA

Compact in size, but packed with a Full HD 1080p camera! A large 2.7" screen on the back is included for view / review functions, while a G-Sensor provides automatic recording functionality. The wide 120° lens offers great field of view, while the adjustable suction-mounting bracket gives you total control over the position. Works on 12-24VDC systems, so it's suitable for trucks too. Audio mic / speaker included, as well as a rechargeable battery so it can provide monitoring while parked too. Includes suction cup mount, car cigarette lighter charger and USB cable.

- G-Sensor
- Wide Dynamic Range Lens
- Loop, Motion & Manual Recording
- Parking Mode
- Auto Power On
- 12/24VDC Operation
- In-Built Mic & Speaker

Due in June



WARRANTY



SPECIFICATIONS	QV-3847
<b>LCD Screen Size</b>	2.7"
<b>Video Resolution</b>	Up to 1080p
<b>Camera Resolution</b>	2MP
<b>Lens Angle</b>	120°
<b>Video Compression</b>	H.264
<b>Video File Format</b>	MP4
<b>Storage</b>	Up to 32GB microSD
<b>Battery</b>	Li-ion 3.7V, 300mAh
<b>Power</b>	5VDC/1.5A
<b>Car Charger</b>	12-36VDC
<b>Dimensions</b>	76(W) x 55(H) x 34(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
	QV-3847	\$139.00	\$124.95	\$110.95

## ▼ EVENT RECORDERS - DASH CAMS (CONTINUED)

### 1080P DASH CAMERA WITH GPS

Recording incidents on the road has never been easier, simply set and forget. The on-board GPS records location while the full high definition 1080p camera provides clear video of any incidents. The ultra-wide 170° lens provides an ultra-wide viewpoint to maximise coverage. The large 2.7" rear screen gives easy access to all on-screen controls and video review, with simple operation using the on-board buttons. Powered by the included cigarette lighter or USB plug for flexibility, it's mounted to your windscreen using the included suction-cup mount.



SPECIFICATIONS	QV-3858
LCD Screen Size	2.7"
Video Resolution	Up to 1080p
Camera Resolution	12MP
Lens Angle	170°
Video Compression	H.264
Video File Format	MOV
Storage	Up to 64GB microSD
Battery	Li-ion 3.7V, 400mAh
Power	5VDC/1.5A
Car Charger	12-36VDC
Dimensions	104(W) x 47(H) x 33(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p	QV-3858	\$199.00	\$179.00	\$159.00

### 1296P EVENT CAMERA WITH GPS FOR BIKES

Just as dash cams have become popular with drivers, there is now an option for motorbikes and cyclists. This fully self-contained rechargeable unit will record for up to 2hrs continuously, and is IPX5 waterproof rated to take whatever weather you're riding in. It includes a GPS to record your position, a quick-release mount for no-fuss recharging, and records to your favourite microSD card up to 32GB. It includes optional audio recording, and a huge 122° viewing angle to help make sure everything is in view.

- Super HD Video
- IPX5 Waterproof
- Rechargeable Battery



SPECIFICATIONS	QV-3870
LCD Screen Size	N/A
Video Resolution	Up to 1296p
Camera Resolution	3MP
Lens Angle	122°
Video Compression	H.264
Video File Format	MOV
Storage	Up to 128GB microSD
Battery	Li-ion 3.7V, 1100mAh
Power	5VDC/1A
Car Charger	5VDC
Dimensions	47(W) x 70(D) x 50(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p	QV-3870	\$249.00	\$219.00	\$199.00

### 1080P WI-FI DASH CAMERA WITH GPS

A very versatile, full 1080p HD dash camera. It's Wi-Fi enabled to allow footage playback and sharing from your iOS™ or Android enabled device using the free app. This unit features starlight video recording which provides you enhanced night vision while driving. The unit supports monitoring while parked, so it will start recording for a short period of time if a car crashes into you. Of course recording can be set to loop, manual or motion triggered; with auto loop to record over old footage when the card is getting full. An internal battery provides functionality while the car is switched off too! It includes a strong windscreen mount, and is compatible with 12 and 24V systems, so it works in a truck too! Includes car cigarette lighter charger, USB cable and a spare adhesive mount.

- Wi-Fi Smartphone Playback & Video Sharing
- Free Android & iOS™ Smartphone App
- Starlight Enhanced Night Vision
- Parking Mode
- Loop, Motion & Manual Recording
- Windows & Mac™ Open Street Map Software
- Auto Power On Recording
- 12/24VDC Operation
- In-Built Mic & Speaker



SPECIFICATIONS	QV-3865
LCD Screen Size	1.2"
Video Resolution	Up to 1080p
Camera Resolution	3MP
Lens Angle	120°
Video Compression	H.264
Video File Format	MP4
Storage	Up to 64GB microSD
Battery	Li-ion 3.7V, 180mAh
Power	5VDC/1.5A
Car Charger	12-36VDC
Dimensions	87(H) x 50(W) x 36(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
1080p Wi-Fi Dash Cam with GPS	QV-3865	\$249.00	\$219.00	\$199.00

## Select Your Model: Reversing Cameras



	QM-3840	QM-3856	QM-8046	QM-3742
LCD Screen Dia.	4.3"	4.3"	7"	7"
Camera Type	Wireless	Wireless (Long Range)	Wireless	Wired
Cameras Supplied	1	1	1	1
Camera Channels	2	2	2	2
Built-in IR LEDs	•	•	•	•
Power Input	12/24V	12/24V	12/24V	12/24V
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### 2.4GHZ DIGITAL WIRELESS 4.3" REVERSING CAMERA

The best thing about wireless cameras is that they are easy to install and use. This camera kit consists of an LCD monitor and reversing camera for the rear of your car. The LCD monitor plugs directly into your car's cigarette lighter socket, receives video wirelessly from the camera. The camera can be connected to a suitable power source at the rear of the vehicle.

- 2.4GHz digital wireless technology
- 12/24VDC operation
- 50m transmission range
- Infrared night vision



SPECIFICATIONS	QM-3840	MONITOR		CAMERA	
Frequency	2.4GHz Digital	LCD	4.3"	Resolution	640 x 480
Voltage Input	8-30VDC	Resolution	480 x 272	Image Sensor	1/4" CMOS
Range	Up to 50m	Current Consumption	Up to 180mA	Lens Angle	105°
		Dimensions	140(L) x 87(W) x 21(H)mm	Infrared LEDs	6
				IP Rating	IP65
				Current Consumption	Up to 220mA
				Dimensions	84(W) x 42(H) x 36(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
2.4GHz Digital Wireless 4.3" Reversing Camera	QM-3840	\$229.00	\$199.00	\$179.00
Spare Wireless Camera to Suit	QM-3854	\$109.00	\$97.95	\$86.95

### 2.4GHZ DIGITAL LONG RANGE REVERSING CAMERA KIT

Confidently manoeuvre your caravan, truck, 4WD or trailer and avoid unseen or unexpected obstacles when reversing with this wireless camera kit. The 4.3" colour display and camera features signal stabilisation and processing for high speed observation of up to 100m range as standard reversing cameras will not provide enough distance to reach a caravan, truck or trailer. Prior to travelling, securely affix the camera in place and plug the monitor into your vehicle's 12V auxiliary power outlet, then pair them to adjust the camera to the preferred angle. You can pair up to two cameras with an additional camera (QM-3857) being placed on your car or 4WD and one on your caravan or trailer to have a dual camera display or be viewed individually. The camera features infrared night vision, adjustable angle and waterproof housing to ensure it will cope in the harshest weather conditions. Includes suction cup mount & cigarette lighter plug power for the monitor

- On-Screen Backup Guideline
- 12/24VDC Operation
- Infrared Night Vision

CAMERA		MONITOR	QM-3856		
Frequency	2.4GHz Digital	Frequency	2.4GHz Digital		
Resolution	720 x 480	LCD	4.3"		
Image Sensor	1/3" CMOS	Resolution	480 x 272		
Lens Angle	110°	Range	Up to 100m		
Infrared LEDs	6	Antenna	3dBi		
Antenna	3dBi	Voltage Input	8-30VDC		
IP Rating	IP65	Current Consumption	Up to 250mA		
Voltage Input	8-30VDC	Dimensions	140(L) x 87(W) x 21(H)mm		
Current Consumption	Up to 350mA				
Dimensions	84(W) x 42(H) x 36(D)mm				



	CAT.	Qty 1+	Qty 2+	Qty 4+
Reversing Camera Kit	QM-3856	\$319.00	\$279.00	\$249.00
SPARE PARTS	CAT.	Qty 1+	Qty 2+	Qty 4+
Spare Camera to Suit	QM-3857	\$139.00	\$124.95	\$110.95
Spare Suction Cup Mount to Suit <b>NEW</b> *Not stocked in all stores	QM-3859	\$4.95	\$4.45	\$3.95





## WIRELESS REVERSING CAMERA KITS (CONTINUED)

### 2.4GHZ DIGITAL WIRELESS REVERSING CAMERA WITH 7" LCD DISPLAY

Utilising digital 2.4GHz wireless technology, this wireless reversing camera system offers up to 80m range with crystal clear picture quality and negligible video lag. Ideal for large vehicles with big blind spots such as trucks, buses, RV's, etc. The IP65 waterproof camera supplied comes fitted with IR LEDs for operation in low light conditions. Video is displayed on the slimline 7" LCD monitor, which has a quick latch bracket, so it can be easily removed & hidden away from prying eyes when not in use.

Additional cameras for system expansion are available - QM-8047.

SPECIFICATIONS	QM-8046
LCD	7"
Power	12 - 24VDC
Range	Up to 80m
Image Sensor	1/4" Colour CMOS
Dimensions	205(L) x 120(H) x 25(D)mm
Effective Pixels	640 x 480
Frequency	2.4GHz Digital
Channels	2
TV System	PAL
Dimensions	225(L) x 160(W) x 40(H)mm



**1 YEAR**  
WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
7" LCD Display	QM-8046	\$319.00	\$279.00	\$249.00
Wireless Infrared Camera	QM-8047	\$99.95	\$89.95	\$79.95

## WIRED REVERSING CAMERA KITS

### ULTIMATE REAR-VIEW SYSTEM - WIRED

This unit enables you to monitor the area to the rear of a bus, truck, caravan, RV etc, view a much wider field-of-view than any rear view mirror array and works in the dark with IR lighting. The system comes with a 7" (diagonal) LED display that has two video inputs, so you could (for example) have another camera monitoring, say bus passengers (camera extra). The rear vision camera is fitted with a SHARP (Japan) CCD device with 18 x IR LED's for night vision illumination. The housing of the camera is metal, IP65 and has a gymbal bracket. It can be mounted externally. The kit is supplied with 10m of preterminated connecting cable. A remote control for the monitor is also provided. In keeping with the professional status of the product, it will work from 12 or 24VDC. Camera measures 74 x 48 x 65mm

SPECIFICATIONS	QM-3742
LCD	7"
Power	12/24VDC
Range	Wired
Image Sensor	Sharp
Camera Resolution	420 TV Lines
Frequency	Wired
Channel	2
TV System	PAL/NTSC
Dimensions	178(L) x 120(H) x 28(D)mm



**1 YEAR**  
WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
Reversing Camera with 7" Display	QM-3742	\$249.00	\$225.00	\$198.95
10m Camera Extension Lead	QM-3743	\$14.95	\$13.45	\$11.95

## REVERSING & SIDE CAMERAS

### FLUSH MOUNT MINI WATERPROOF CAMERA FOR CARS OR TRUCKS

SPECIFICATIONS	QC-3530
Sensor	PC7070
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0Lux
IP Rating	IP67
Video Out	1Vp.p. 75 ohm
Power Supply	9-12VDC
Dimensions	18.5(Dia.)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
420TVL CMOS	QC-3530	\$49.95	\$44.90	\$39.90

### COLOUR CCD WIDE ANGLE WATERPROOF REAR VIEW CAMERA

SPECIFICATIONS	QC-3532
Sensor	PC7070
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0.5Lux
IP Rating	IP67
Video Out	1Vp.p. 75 ohm
Power Supply	8-12VDC
Dimensions	22(W) x 15(Dia.)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
420TVL CCD	QC-3532	\$49.95	\$44.90	\$39.90

### FLUSH MOUNT CCD REAR VISION CAMERA

SPECIFICATIONS	QC-3534
Sensor	PC7070
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0.5Lux
IP Rating	IP67
Video Out	1Vp.p. 75 ohm
Power Supply	9-12VDC
Dimensions	26(Dia.)mm including bezel



	CAT.	Qty 1+	Qty 2+	Qty 4+
420TVL CCD	QC-3534	\$119.00	\$106.95	\$94.95

### BUS / TRUCK CAMERA WITH INFRARED LEDS - CCD

SPECIFICATIONS	QC-3536
Sensor	Sharp 1/4 CCD
Resolution	420 TV lines
View Angle	120°
Minimum Illumination	0.5Lux
IP Rating	IP67
Video Out	1Vp.p. 75 ohm
Power Supply	12VDC
Dimensions	74(W) x 65(H) x 48(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
420TVL CCD	QC-3536	\$119.00	\$106.95	\$94.95

## CAR SECURITY

### STEELMATE ENTRY LEVEL CAR ALARM WITH VOICE FUNCTION

An affordable car alarm that features voice feedback on alarm status and operational parameters such as open doors etc.

#### What you get:

- Electronic black box controller
- Shock sensor, Ignition cutout relay
- Speaker siren
- Wiring looms
- Bonnet pin switch
- Car charger for the remote controls
- Extra circuits for fuel and ignition cutout
- 2 x Code hopping remote control units, one with a built in torch!

#### Also good for:

- Vans with expensive stuff in the back
- Large enclosed trailers

#### Kit includes:

- Metallic water resistant 5-button transmitters
- Dedicated boot release button
- Voice warning (ON / OFF)
- Valet mode
- Anti-hijacking, emergency call & locating
- Emergency override



	CAT.	Qty 1+	Qty 2+	Qty 4+
Car Alarm	LA-9003	\$129.00	\$115.95	\$102.95
Spare Remote	LA-9004	\$37.95	\$33.95	\$30.45
Spare Remote Car Charger	LA-9021	\$9.95	\$8.75	\$7.75

## CENTRAL LOCKING

### 4 DOOR REMOTE CONTROLLED CENTRAL LOCKING KIT WITH KILL SWITCH

Lock and Unlock your car doors from a distance without having to fumble around with keys. Includes outputs to flash the indicators for visual confirmation, as well as outputs for sunroof and window closers (where fitted). An additional security button can be installed to cut off the fuel pump to prevent the car being stolen. Supplied with 1 master actuator, 3 slave actuators, and control relay, two remotes with batteries, kill switch, hardware and wiring loom.

- Working voltage: 9 - 16VDC
- Frequency: 433.92MHz



	CAT.	Qty 1+	Qty 2+	Qty 4+
	LR-8842	\$89.95	\$80.95	\$71.95

### MASTER & SLAVE DOOR LOCK ACTUATORS

Durable, waterproof and dustproof with Japanese mechanics, and supplied with universal mounting hardware. Wiring not included.

- Japanese Mabuchi motor
- Original Nylon and POM
- PTC overload protection
- Life cycle: 100,000 times
- Push/Pull force: > 4.0 kg
- Input voltage: 9 - 16VDC

**MASTER DOOR LOCK ACTUATOR** CAT. LR-8815

**SLAVE DOOR LOCK ACTUATOR** CAT. LR-8813



	CAT.	Qty 1+	Qty 2+	Qty 4+
Master	LR-8815	\$14.95	\$13.35	\$11.70
Slave	LR-8813	\$12.95	\$11.35	\$10.35

### 4 DOOR POWER LOCK KIT

Add that touch of luxury to your car with this low cost 4 door central locking kit, so when you unlock the drivers door the other three doors will also unlock. It can be connected to car alarms with a negative triggering locking output, or used with our LR-8839 remote controller for keyless entry.

- Supplied with 1 master, 3 slave actuators, control relay, hardware and wiring loom



	CAT.	Qty 1+	Qty 2+	Qty 4+
4 Door Power Lock Kit	LR-8812	\$39.95	\$35.90	\$31.90

### REMOTE CONTROLLED CAR CENTRAL LOCKING SYSTEM

Upgrade to a remote keyless car entry with this system. On rainy or windy days where you need a quick entry, unlock your doors as you approach the car. The system is easy to install with 2 keyfob and comes with two remote keyfobs.

#### SPARE REMOTE CONTROL

Spare Remote Control for LR-8839 Central Locking System. Supplied with one 12V battery (For replacement batteries use our SB-2422.)



	CAT.	Qty 1+	Qty 2+	Qty 4+
Central Lock System	LR-8839	\$49.95	\$44.90	\$39.90
Spare Remote	LR-8837	\$19.95	\$17.70	\$15.70

### CAR BOOT / HATCH RELEASE

This great little gadget installs on your boot or hatch lock so that unlocking simply involves pressing a button (supplied)! Solenoid comes with mounting bracket, wiring loom (fuse included), dash mount pushbutton switch and installation instructions.

- Solenoid Unit (including bracket): 95(L) x 43(D) x 58(H)mm
- Switch (on L bracket): 50(H) x 44(W) x 40(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
	LR-8834	\$39.95	\$35.90	\$31.90

## KEYFOB

### KEYFOB LEARNING REMOTE 250 - 450MHZ

A wider frequency range that includes some automatic garage door openers. Will learn up to 4 different codes and make your life a little easier by letting you control all your alarms with just one fob. A typical situation could be using the same remote for your car, your partner's car and the garage door with a spare button for the house alarm.

- Frequency: 250MHz to 450MHz.
- Supplied with A23 battery
- Not suitable for code hopping alarms



	CAT.	Qty 1+	Qty 2+	Qty 4+
Keyfob Remote	LA-8992	\$44.95	\$40.45	\$35.95

### DASH MOUNT FLASHING LED -12V

With a metal bezel and a very bright 5mm LED, this flasher is excellent as a fake car alarm. Installed on your dash, thieves can be led to believe that your car is alarmed).



SPECIFICATIONS	LA-5082
Bezel Dimensions	30(D) x 7(W)mm
Face Diameter	11mm
Operating Voltage	12V
Wire Lead Length	400mm

	CAT.	Qty 1+	Qty 10+	Qty 25+
	LA-5082	\$6.95	\$6.25	\$5.50

## ▼ TAMPER SWITCHES

### TAMPER (PIN) STYLE - 2 PACK

Low cost spring loaded switch, simply make to frame (or earth) when pin is released i.e. by operating car or cabinet door, etc. 57mm overall, 12mm pin travel. Bullet connector termination

	CAT.	Qty 1+	Qty 4+	Qty 8+
Pack of 2	LE-8775	\$5.95	\$5.25	\$4.75

### METAL TAMPER (PIN) STYLE - 2 PACK

Ideal for car bonnets, this heavy duty pin switch is nickel plated for protection from corrosion. The plunger is plastic and can be cut to suit the required length/depth. Supplied with locking nuts and star washer. The bezel's mounting depth is also adjustable. Termination is via a 6.4mm spade lug.

SPECIFICATIONS	LE-8776		
Length (Main Body)	38mm	Including Plug & Lug	70mm
Shaft Diameter	7.75mm	Fascia Nut Size	11mm
Locking Nut Size	12mm	Travel (Max)	13.5mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
Pack of 2	LE-8776	\$7.95	\$6.95	\$6.25

### METAL FASCIA INSET PIN SWITCH - 2 PACK

Inset pin switch with plated metal fascia. Suitable as a replacement door switch. The sturdy plunger can be cut to length. Termination via right angle 6.4mm spade lug.

SPECIFICATIONS	LE-8777		
Fascia	34.5 x 16.5mm		
Pin	27(L) x 8(dia)mm		
Depth Behind Fascia	15mm (not inc lug & pin)		
Overall Depth	51mm		
Travel (Max)	8mm		

	CAT.	Qty 1+	Qty 2+	Qty 4+
Pack of 2	LE-8777	\$7.95	\$6.95	\$6.25

### VAN SLIDING DOOR STYLE

Double action sliding door switch, primarily designed for van doors and tailgates. Supplied with rubber mounting plates, screws, template stickers and installation instructions. Contacts are rated at a massive 20A @ 12V

	CAT.	Qty 1+	Qty 2+	Qty 4+
12VDC 20A Each	LE-8779	\$18.95	\$16.95	\$14.95

## ▼ STROBES

### 12VDC WATERPROOF LED STROBE LIGHTS

LED strobes for security, alarm or emergency use. Low current consumption units are fully sealed and waterproof; suitable for outdoor alarm applications. Mounts with 2 x 5mm bolts.

- Dimensions: 70(Dia) x 45(H)mm

COLOUR	CAT.	Qty 1+	Qty 4+	Qty 8+
Blue	LA-5326	\$19.95	\$17.70	\$15.70
Red	LA-5327	\$19.95	\$17.70	\$15.70
Amber	LA-5328	\$19.95	\$17.70	\$15.70

### 12VDC LED STROBE LIGHT WITH MAGNETIC BASE

Designed to be mounted on to the roof for maximum visibility. Moulded curly cord with cigarette plug for power. Note: For off-road use only.

- 40 super bright, high intensity LEDs
- Cigarette lighter plug for power
- Heavy duty magnetic base for secure mount
- Dimensions: 95(H) x 130(Dia.)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
12VDC	ST-3295	\$49.95	\$44.95	\$39.95

### 12/24VDC LED STROBE LIGHT WITH MAGNETIC/ PERMANENT BASE

- High power amber LEDs
- 10 selectable flash modes
- 12 or 24VDC powered
- Suitable for trucks too

Note: Press pattern button 0.5 seconds for next pattern.



SPECIFICATIONS	ST-3278
Power	12 / 24VDC
Cable	1m curly cable with cigarette lighter plug
Mounting	Magnetic feet, or permanent screw mount
Dimensions	280(W) x 165(D) x 62(H)mm (including mounting feet)

	CAT.	Qty 1+	Qty 5+	Qty 10+
	ST-3278	\$129.00	\$115.95	\$102.95

## ▼ SIRENS

### WATERPROOF SIREN - 90DB

Suitable for cars, boat and truck applications.

SPECIFICATIONS	LA-8901
Operating Voltage	12V - 24VDC
Sound Output	>90dB
Dust And Waterproof Rating	IP66
Termination	Spade lugs
Dimensions	50(L) x 40(Dia.) x 34.5(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
	LA-8901	\$17.95	\$15.95	\$13.95

### ELECTRONIC SIREN

Small sized - ideal for mounting in a cramped engine bay!

SPECIFICATIONS	LA-8908
Operating Voltage	12VDC
Sound Output	125dB
Power Rating	20 watts
Current Draw	1.3 Amp.
Dimensions	70(H) x 67(L) x 59(W)mm including brackets

	CAT.	Qty 1+	Qty 2+	Qty 4+
	LA-8908	\$19.95	\$17.95	\$15.95

### MINI REVERSE WARNING SIREN 12/24VDC

Beeps when power is applied, and features a mute function that you can connect to the parker lights to mute the siren at night time if desired.

SPECIFICATIONS	LA-8904
Operating Voltage	9-30VDC
Current Consumption	<200mA
Sound Output	>90dB
Dust And Water Resistance Rating	IP65
Termination	Fly leads
Mounting Hole	6.5mm
Dimensions	55(Dia.) x 37.5(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
	LA-8904	\$9.95	\$8.75	\$7.75

### SIX-TONE CAR ALARM SIREN WITH BACK-UP BATTERY

This compact siren has a rechargeable back-up battery pack mounted inside the unit, so if the wires are cut, the siren will sound and the only way to disable the unit is to turn it off with a key. Internal batteries are kept on trickle charge so they are always fully charged. Supplied with 2 keys.

SPECIFICATIONS	LA-8912
Power	20W
Voltage	12VDC
Impedance	10 ohm
Output	118dB
Dimensions	100(L) x 61(W) x 57(D)mm including brackets

	CAT.	Qty 1+	Qty 2+	Qty 4+
	LA-8912	\$24.95	\$22.45	\$19.95

**NOT SURE  
WHAT TO BUY?**

Give a Jaycar Gift Card  
and let them choose!





## GPS TRACKING DEVICES

### 3G GPS/GSM VEHICLE TRACKER

This 3G GSM and GPSTracking solution will locate and track the whereabouts of your vehicle in real time via the Internet on a computer or Smartphone. The device is easy to install with only 2 - 4 wires to connect. Insert a 3G GSM Sim card (not included) and hide the device away while connecting the external antenna to your windscreen. It works by sending the vehicle's GPS coordinates via the GSM network to the free online tracking service, which shows the location on Google Maps. It can also SMS longitude and latitude coordinates to up to 3 mobile phones, as well as alerts when vehicle exits a pre-determined area or exceeds pre-set speed.

Other features include an engine kill function to remotely disable the petrol pump, and movement sensor to extend battery life. An SOS/Panic button is also supplied which can send an SMS to the pre-programmed mobile phones. The built-in rechargeable Li-Po battery will keep the device functioning for up to 4 days when power is disconnected, which could help you locate the vehicle should it have been stolen and abandoned. There is no installation or on-going tracking charges. You only pay for the GSM sim card and service. Supplied with an external antenna, wiring loom, SOS button and microphone

- Real time & history online tracking website
- Free Smartphone App available on iTunes® & Google Play
- SMS location & tracking return
- Remote engine immobilisation
- Geo fence alarm
- External microphone
- Over speed alarm
- Shock & movement alarm
- External SOS/Panic button
- Rechargeable battery

Please Note: This tracker is compatible with 4G SIM cards, however it only operates on a 3G band.

Tracking Website: [www.responsegps.com](http://www.responsegps.com)



 View live footage on a Smartphone.  
*Smartphone not included.*



SPECIFICATIONS	LA-9026
GPS/GSM Module	3G Quad Band
GSM Frequency	850/900/1800/1900MHz
GPS/GSM Antenna	Internal Windscreen
Location Accuracy	5-10m
Upload Interval	30-999 Seconds
3G Data Usage	0.07KB (Each Upload Interval)
GPS Start Time	1 Second (Hot Start), 36 Seconds (Cold Start)
Operating Voltage	9-30VDC
Tracking Current	5V @ 150mA
Standby Current	5V @ 3mA
Recharging Current	5V @ 400mA
Battery	500mAh Li-ion
Dimensions	90(L) x 53(W) x 20(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
Vehicle Tracker	LA-9026	\$299.00	\$269.00	\$239.00

### 3G GPS/GSM PERSONAL TRACKER

Locate and track the whereabouts of a person, personal belonging or vehicle in real time via your mobile phone. The tracker is rechargeable and compact so it can fit unobtrusively inside a pocket, handbag, luggage, vehicle, etc. To operate, simply insert a GSM Sim card (not included), charge and turn on. It then sends it's GPS coordinates via the GSM network to your mobile phone which can be viewed on Google Maps.

Latitude, longitude, speed, direction, date & time, and battery condition or a GoogleMaps website link can be sent at any time by sending an SMS from your mobile phone to the tracker. You can also set it to SMS details once movement is detected, when the tracker is in a pre-determined area, over a preset speed, or when the battery is getting low.

A microphone and speaker in the tracker also allows you to dial in to listen to sounds around the tracker, and one of two phones can be called from the tracker for two way communication. To top off the rich list of features is a SOS button that sends help information to up to three pre-set phone numbers. A USB cable and mains power adaptor is supplied to recharge the built-in rechargeable Li-ion battery, which will keep the tracker functioning for up to 3 days on standby.

- Real time & history online tracking website
- Free Smartphone App available on iTunes® & Google Play
- SMS location & tracking return
- Geo fence alarm
- External microphone
- Shock & movement alarm
- External SOS/Panic button
- Rechargeable battery

Tracking Website: [www.responsegps.com](http://www.responsegps.com)



 View live footage on a Smartphone.  
*Smartphone not included.*

SPECIFICATIONS	LA-9028
GPS/GSM Module	3G Quad Band
GSM Frequency	850/900/1800/1900MHz
GPS/GSM Antenna	In-built
Location Accuracy	10-20m
Upload Interval	30-999 Seconds
3G Data Usage	0.07KB (Each Upload Interval)
Tracking Current	5V @ 50mA
Standby Current	5V @ 3mA
Recharging Current	5V @ 300mA
Battery	1000mAh Li-ion
Dimensions	61(L) x 42(W) x 11(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
Personal Alarm	LA-9028	\$299.00	\$269.00	\$239.00

### Attention Educators! Can we Help?

If you're a parent or teacher and would like some practical resources or help, then your local Jaycar Store or Stockist can assist you with a wide range of learning projects for all ages.

### Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

**Catalogue Department - Jaycar Electronics:**  
[catalogue@jaycar.com](mailto:catalogue@jaycar.com)

## CAR DISPLAYS

### LCD GPS SPEEDOMETER

More accurate than mechanical speedometers, the GPS speedometer works independently of the vehicle so it is not subject to factors such as tyre pressure, circumference, diff ratio, etc. This wireless unit is also safe to use on the road as the big LCD display can be mounted on the windshield and allows you to check speed without having to take your eyes off the road. You can also take this anywhere, use it on your boat, ATV or bike. Supplied with suction mount holder, USB cable and cigarette lighter charger.

- Selectable mph or km/h
- 2" Large digit display
- Rechargeable via USB, 5V/500mA
- Dimensions: 67(W) x 51(H) x 25(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
GPS Speedometer	LA-9025	\$99.95	\$89.95	\$79.95

### OBDII HEADS UP DISPLAY

This device obtains diagnostic data from your vehicles OBDII port & projects the information to your windscreen so you don't have to take your eyes off the road to view what's happening. Features a 3" multicolour LED display. Information available includes:

- Speed
- Engine Speed
- Water Temperature
- Battery Voltage
- Fuel Consumption
- Low Voltage Alarm
- High Temperature Alarm
- Speed Alarm



	CAT.	Qty 1+
OBD II Hud	LA-9027	\$46.95

### GPS 5.5 INCH HEAD-UP DISPLAY

This is the big brother of heads up displays. It features all the standard features such as current speed in km/h or mp/h, as well as a compass. However, it also provides a tripmeter (distance travelled) and driving time, which can be extremely useful. The large 5.5" display ensures all information is large, clear, and easily read. Additional information is also provided such as current altitude and the number of satellites currently in range for precision. It's a fantastic unit, and a great safety addition to your vehicle to ensure you keep your eyes on the road.

#### Features:

- Very large 5.5" display
- Easy install, plug and play
- Altimeter and tripmeter functionality



SPECIFICATIONS	LA-9034
Power	5-18VDC
Compass Precision	+/- 1°
Speed Range	0-4000km
Satellite Positioning Time	30 Seconds (Cold Start), 1 second (Hot Start)
Weight	115g
Dimensions	125(W) x 75(H) x 15(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
GPS 5.5 Inch Head-Up Display	LA-9034	\$99.95	\$89.95	\$79.95

## Find Out More In Store:

Our staff offer friendly and helpful service.  
We're here to help.

### GPS 3.5 INCH HEAD-UP DISPLAY

Keep an eye on your speed without diverting your eyes from the road! Peripheral vision speedometers made their way into various production cars, but the concept never really took off. A heads-up display turns your windscreen into the screen, by shining onto it from the dashboard. It means you can see, and look through the display, while still looking at the road in front of you. It's fully self-contained, requiring nothing but power from your vehicle. A GPS sensor provides speed calculations, while an internal compass provides current direction. An adjustable over-speed alarm is very useful for motorway driving, displayed in km/h and mp/h. Adjustable brightness to match the conditions too.

#### Features:

- Internal GPS and compass
- Easy install, plug and play
- Adjustable speed alarm



SPECIFICATIONS	LA-9032
Power	8-18VDC @ 40mA
Compass Precision	+/- 1°
Speed Range	0-400km
Satellite Positioning Time	30 Seconds (Cold Start), 1 second (Hot Start)
Weight	40g
Dimensions	90(W) x 54(H) x 12(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
GPS 3.5 Inch Head-Up Display	LA-9032	\$69.95	\$62.95	\$55.95

## ENGINE MANAGEMENT

### SPEEDO CORRECTOR MODULE FOR CARS

When you modify your gearbox, diff ratio or change to a large circumference tyre, it may result in an inaccurate speedometer. This module alters the speedometer signal up or down from 0% to 99% of the original signal. With this improved model, the input setup selection can be automatically selected and it also features an LED indicator to show when the input signal is being received.



SPECIFICATIONS	AA-0376
Power	12VDC
Dimensions	63(L) x 46(W) x 25(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AA-0376	\$44.95	\$40.45	\$35.90

### VERSATILE AUTOMOTIVE LED DISPLAY MODULE FOR CARS

This versatile module will allow you to monitor the battery voltage, the airflow meter, or oxygen sensor in your car. It features a 10 LED indicator that illuminates in response to the measured voltage so you can see if your O2 sensor is causing your car to run too rich or too lean. Preset 9-12V, 0-5V or 0-1V ranges, complete with fast response time, high input impedance and auto dimming for night time driving.



SPECIFICATIONS	AA-0375
Power	12VDC
Dimensions	81(L) x 52(W) x 21(H)mm

	CAT.	Qty 1+
LED Display Module	AA-0375	\$4.95

### FUEL MIXTURE DISPLAY MODULE FOR CARS

This very simple module will allow you to monitor the fuel mixtures being run by your car. This type of sensor is also known as an E.G.O. (exhaust, gas, oxygen) monitor. You can use it as a tuning tool, to help in vehicle modification or simply to see the behaviour of the engine control module. Indication is via 10 LEDs to show mixtures rich, lean and normal. The circuit connects to the EGO sensor mounted in the exhaust manifold & the cars battery.



SPECIFICATIONS	AA-0374
Power	12VDC
Dimensions	81(L) x 51(W) x 22(H)mm

	CAT.	Qty 1+
Fuel Mixture Display Module	AA-0374	\$4.95





# IT & Communications



## COMPUTER & NETWORKING:

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## MODEM ROUTERS

### N300 WI-FI VDSL/ADSL MODEM ROUTER WITH USB SHARING

Connect to the Internet with this super-fast VDSL2/ADSL2+ modem or Ethernet WAN port. This NBN-ready device connects your home or office today, and is equipped with a Gigabit Ethernet WAN port to provide an instant connection to a Fibre / NBN / UFB service when available. Create multiple high speed Wi-Fi connections using the Wireless N300 Access Point, and establish a storage network using the 2 USB ports to share hard drive files with all connected users. Simple and secure setup.

- Fully featured VDSL2 / ADSL2+ Modem Router
- 1 x 10/100/1000 Gigabit Ethernet WAN port for connection to fibre services
- 4 x 10/100 Ethernet LAN ports for high speed wired connections
- Wireless N300 Access Point for multiple high speed Wi-Fi connections
- 2 x USB host ports & supports USB storage device for file sharing
- Built-in media server (BYO USB hard drive)
- IPTV IGMP V1 V2 Pass through
- QoS
- IPv6 ready for the next generation IP addressing
- Layer 2 Bridge Mode Support



	CAT.	Qty 1+
N300 VDSL/ADSL Modem Router	YN-8345	\$129.00

### AC1200 VDSL/ADSL MODEM ROUTER

The Archer VR400 unlocks the full potential of your internet connection by providing combined dual band Wi-Fi speeds of up to 1.2Gbps, including 300Mbps on the 2.4GHz band and 867Mbps on the 5GHz band, eliminating lag and buffering from your online experience. Two dedicated Wi-Fi networks support more devices and reduce wireless interference to create stable connections.

- Speedy Wi-Fi – Superb wireless experience with 300Mbps (2.4GHz) + 867Mbps (5GHz) dual-band Wi-Fi connections
- Superior Range – Three fixed antennas provide stable wireless connections and optimal coverage
- Versatile Connectivity – Fully compatible with the VDSL2/ADSL2+/ADSL standards
- Beamforming Technology – Improves wireless range and performance at 5GHz band
- USB Port – Supports storage and print service sharing, FTP and media servers as well as 3G/4G dongle
- Tether App – TP-LINK Tether provides the easiest way to access and manage the router on your iOS and Android devices



	CAT.	Qty 1+
AC1200 VDSL/ADSL Modem Router	YN-8440	\$169.00

## ROUTERS

### N300 WIRELESS BROADBAND ROUTER

Sharing your internet connection and networking your computers is made easy. It provides powerful 300Mbps wireless connectivity, as well as four wired ethernet ports. Dual antennas help boost signal strength and reduce dead-spots, while WPS provides hassle-free connection. The WAN port provides PPPoE, Dynamic and Static IP broadband support functions. It's also NBN compatible to provide smooth streaming of your favourite content. Easy to setup and configure, but still provides some advanced firewall configurations too, this is a great compact unit for the home or small office.



SPECIFICATIONS	YN-8390
Interface	4 x 10/100Mbps LAN Ports, 1 x 10/100Mbps WAN Port
Power	5VDC
Antennas	2 x 5dBi Omni Directional
Wireless Standards	IEEE 802.11n/g/b
Frequency Range	2.4GHz
Signal Rate	11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64/128/152-bit WEP/WPA/WPA2/WPA-PSK/WPA2-PSK
Dimensions	145(W) x 24(H) x 92(D)mm (Excluding Antennas)



	CAT.	Qty 1+	Qty 4+	Qty 10+
N300	YN-8390	\$49.95	\$44.95	\$39.95

### AC1200 SMART WI-FI ROUTER

Featuring the latest 802.11AC wireless standards for solid streaming, fast gaming, and interrupt-free networking. A stunning aesthetic design meets core functionality with the use of four 5dBi high performance antennas (two for each band), for better connectivity and greater range. It also provides a USB port for centralised storage and network sharing of data. Management is simplified with the use of a Smart App, so you can manage your network anytime. Dual 2.4G and 5G frequencies to support the latest high speed devices without forgetting about legacy devices either. Two 10/100 LAN ports are also provided for wired connectivity or expansion to another network switch. It provides a WAN interface with PPPoE and most other broadband protocols, so it's suitable for NBN connections too.



SPECIFICATIONS	YN-8392
Interface	4 x 10/100Mbps LAN Ports, 1 x 10/100Mbps WAN Port, 1 x USB2.0 Storage Port
Power	5VDC @ 2A (Mains adaptor included)
Antennas	2 x Dual 5dBi Omni Directional (2 per frequency band)
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 867Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64/128-bit WEP/WPA/WPA2/WPA-PSK/WPA2-PSK
Dimensions	195(W) x 31(H) x 169(D)mm (Excluding Antennas)

	CAT.	Qty 1+	Qty 4+	Qty 10+
AC1200 Dual Band	YN-8392	\$99.95	\$89.95	\$79.95

### AC1750 DUAL BAND GIGABIT ROUTER

TP-Link's Archer C7 comes with the next generation Wi-Fi standard – 802.11ac, 3 times faster than wireless N speeds and delivering a combined wireless data transfer rate of up to 1.75Gbps. With 1300Mbps wireless speeds over the crystal clear 5GHz band and 450Mbps over the 2.4GHz band, the Archer C7 is the superior choice for seamless HD streaming, online gaming and other bandwidth-intensive tasks.

- Supports 802.11ac standard - 3 times faster than wireless N speeds
- Simultaneous 2.4GHz 450 Mbps and 5GHz 1300 Mbps connections for 1.75Gbps of total available bandwidth
- Higher Efficiency - Beamforming technology delivers highly efficient wireless connection (supported by Version 4.0 and above)
- USB Port - easily shares files & media with networked devices or remotely via FTP server
- Guest Network Access - provides secure Wi-Fi access for guests sharing your home or office network
- Easy setup and management with Tether App



SPECIFICATIONS	YN-8438
Interface	4 x 10/100/1000Mbps LAN Ports, 1 x 10/100/1000Mbps WAN Port, 2 x USB2.0 Storage Ports
Power	12VDC @ 2A (Mains adaptor included)
Antennas	3 x Dual Omni Directional
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 1300Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64/128-bit WEP/WPA/WPA2/WPA-PSK/WPA2-PSK
Dimensions	243(W) x 160(H) x 33(D)mm (Excluding Antennas)

	CAT.	Qty 1+
AC1750 Dual Band Gigabit Router	YN-8438	\$199.00

Check our website for more information on the latest Wi-Fi standards and speeds: [www.jaycar.com.au/buyingguides](http://www.jaycar.com.au/buyingguides)

### Where's My Local Jaycar Store?:

Use our store finder on our website. With over 300 Jaycar Store and Stockists just type in your postcode or area to find the closest one to you.

## RANGE EXTENDERS

### N300 WI-FI RANGE EXTENDER

This intelligent Wi-Fi device can handle it all. Use it as a repeater to extend the range of your existing Wi-Fi network, provides a Wi-Fi access point for your wired network, or even acts as a router for your existing modem. It connects straight into your mains power outlet for no fuss installation, and configuration is quick and painless (with ultra-simple WPS connectivity supported too). Suitable for 802.11b/g/n standards up to 300Mbps, supporting modern standards for security too. It also features integrated status LEDs for signal strength, as well as quick reference of network status.



SPECIFICATIONS	YN-8370
Interface	2 x 10/100 LAN Port
Operating Modes	Repeater, Access Point, Router
Power	240VAC
Antennas	2 x 2dbi Internal
Wireless Standards	IEEE 802.11n/g/b
Frequency Range	2.4GHz
Signal Rate	11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64/128/152-bit WEP/WPA/WPA2/WPA-PSK/WPA2-PSK
Dimensions	76(H) x 53(W) x 40(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
N300	YN-8370	\$59.95	\$53.95	\$47.95

### AC1200 DUAL BAND WI-FI RANGE EXTENDER

Quickly and simply eliminate dead-spots in your Wi-Fi network, or provide an access point on your existing wired network. It plugs straight into an available mains power point for compact, set and forget use. Dual band operation on 2.4GHz and 5GHz networks for maximum device compatibility. Simple setup and configuration makes it an easy task to tackle at home, but it's still powerful enough for the IT department at the office too.



SPECIFICATIONS	YN-8372
Interface	2 x 10/100 LAN Ports
Operating Modes	Repeater, Access Point, Router
Power	240VAC
Antennas	4 x 2dbi External
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 867Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64/128/152-bit WEP/WPA/WPA2/WPA-PSK/WPA2-PSK
Dimensions	72(H) x 50(W) x 30(D)mm (Excluding Antennas)



	CAT.	Qty 1+	Qty 4+	Qty 10+
AC1200 Dual Band	YN-8372	\$99.95	\$89.95	\$79.95

### Automatic Account:

**For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.**

### AC600 OUTDOOR WI-FI EXTENDER WITH POE

The perfect Wi-Fi companion for your entertaining area, a carpark, or any other outdoor scenario. Provide it a single PoE ethernet connection and it provides you with dual-band Wi-Fi access. Supporting 2.4G and 5G bands, for up to 433Mbps speeds. It acts as a Wi-Fi repeater, access point, or router, and two large antennas (one for each band) help further maximise range. Bundled into a weatherproof outdoor case, it's durable too.

- Single PoE connection
- Dual band Wi-Fi
- 155Mbps @ 2.4GHz / 433Mbps @ 5GHz Max Speed
- Weatherproof
- Weight: 181g
- Dimensions: 55(W) x 430(H) x 55(D)mm (Including Antennas)



**WAVLINK®**



SPECIFICATIONS	YN-8349
Interface	1 x 10/100 LAN Port
Operating Modes	Repeater, Access Point, Router
Power	Single POE
Antennas	2 x 7dbi External
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 433Mbps
Wireless Security	64/128/152-bit WEP/WPA/WPA2/WPA-PSK/WPA2-PSK
Dimensions	55(W) x 430(H) x 55(D)mm (Including Antennas)

	CAT.	Qty 1+	Qty 4+	Qty 10+
AC600	YN-8349	\$119.00	\$107.00	\$95.00

### AC1900 WI-FI RANGE EXTENDER

The ASUS RP-AC68U is an AC1900-class dual-band repeater, with a 3-transmit, 4-receive (3x4) internal antenna array that delivers Wi-Fi speeds up to 1300 Mbps on the 5GHz frequency band and up to 600 Mbps on the 2.4GHz band, for a combined total of up to 1900 Mbps. It's easy to install with its one-touch WPS button, and it features a high-speed USB 3.0 port that works with iCloud to give you fast wireless access to files stored on a connected USB storage device. Five gigabit ports let you convert any wired network device, such as a game console or smart TV, to work wirelessly. Smart status LEDs give you all the information you need to know, at a glance.

- Extend your existing 802.11ac dual-band Wi-Fi network with speeds up to 1900 Mbps.
- Quick and secure setup with just a press of the WPS button.
- Smart LED signal indicator helps you find the best location for optimum Wi-Fi performance.
- USB 3.0 port for iCloud support and fast NAS performance.
- 5 Gigabit Ethernet ports to convert any wired network devices to wireless operation.
- Roaming Assist helps you to get a stable connection everywhere in the home or office.



SPECIFICATIONS	YN-8428
Interface	5 x 10/100/1000Mbps LAN Ports, 1 x USB3.0 Port
Operating Modes	Repeater, Access Point, Router, Media Bridge
Power	19VDC @ 1.75A (Mains adaptor included)
Antennas	4 x Internal
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 1900Mbps, 11n: Up to 600Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	WPA-PSK/WPA2-PSK/WPA-Enterprise/ WPA2-Enterprise/ WPS support
Dimensions	106(W) x 106(D) x 178(H)mm

	CAT.	Qty 1+
	YN-8428	\$249.00



## WHOLE-MESH WI-FI SYSTEMS

### AC1300 DECO M5 MESH WI-FI SYSTEM

Deco is the whole-home Wi-Fi mesh solution with the most comprehensive security. It delivers fast, uninterrupted Wi-Fi to every room by harnessing the power of three separate AC1300 units for up to 350 metres. of seamless coverage.

Deco is also easy to set up and grows as you add devices to your home.

#### HomeCare™

HomeCare gives Deco the most comprehensive security of any whole-home Wi-Fi system.

#### Included with Homecare™

- Robust Parental Controls
- Manage content and control when each device can access the internet.
- 3-Year Built-In Antivirus
- Protect all connected devices in your home from viruses and malware.
- Review a monthly list of usage, blocked content and security threats.
- Quality of Service
- Prioritize devices and applications for faster performance when needed.
- Deco helps you quickly find the perfect spot to place each unit.
- Check on the upload and download speeds of your network to keep it running at full speed.
- ART (Adaptive Routing Technology)
- Automatically chooses the clearest path for all your devices based on the location of each Deco unit.



SPECIFICATIONS	YN-8444 (PER UNIT)
Interface	1 x 10/100/1000Mbps LAN Ports, 1 x 10/100/1000Mbps WAN Port
Operating Modes	Repeater, Access Point, Router
Power	USB-C (Mains adaptor included)
Antennas	4 x Internal
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 867Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Dimensions	120(Dia.) x 38(H)mm



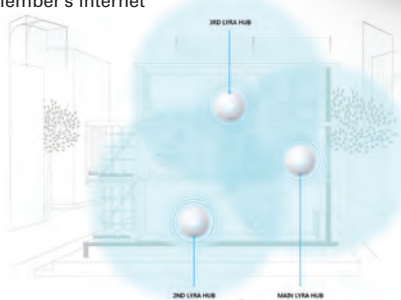
CAT.	Qty 1+
YN-8444	\$399.00

### AC2200 LYRA MESH WI-FI SYSTEM

The ASUS AC2200 Tri-Band Whole-Home Mesh Wi-Fi System (for large homes), with AiProtection network security powered by Trend Micro, ASUS Lyra App and Advanced Parental Control Time to Banish Wi-Fi dead spots and say goodbye to unreliable connections. ASUS Lyra delivers superfast, ultra-reliable Wi-Fi to every corner of your home. Whether you're using a smartphone, PC, game console or a smart-home gadget, Lyra ensures that every device enjoys a smooth, seamless and secure connection anywhere in the house and all the time.

- Smart Antennas – Automatic optimization of hub connections ensures the fastest speeds, all the time
- Smooth Connections, Always – Stay automatically connected to the best possible signal, wherever you are in the home
- Commercial-grade Security – Protect all devices on your home network with ASUS AiProtection
- You're in Control – The ASUS Lyra app enables PC-free setup, network management and diagnostics, and notifies you about any problems
- Family Overview – View and control each family member's internet and app usage from your mobile device

SPECIFICATIONS	YN-8432
Interface	1 x 10/100/1000Mbps LAN Ports, 1 x 10/100/1000Mbps WAN Port
Operating Modes	Repeater, Access Point, Router
Power	12VDC @ 2A (Mains adaptor included)
Antennas	7 x Internal
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz-1 & 5GHz-2
Signal Rate	11ac: Up to 867Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	WPA2-PSK
Dimensions	150(Dia.) x 50(H)mm



CAT.	Qty 1+
YN-8432	\$499.00

## Tech Talk: What Do the N & AC Specs Mean?

	N150	N300	AC450	AC600	AC750	AC1200	AC1300	AC1750	AC1900	AC2200
Wi-Fi Standards	802.11n/g/b					802.11/ac/a/n/g/b				
Wi-Fi Speed (Mbps)	Up to 150	Up to 300	Up to 433	Up to 150 + 433	Up to 300 + 433	Up to 300 + 867	Up to 400 + 867	Up to 450 + 1300	Up to 600 + 1300	Up to 400 + 867 + 867
Frequency (GHz)	2.4		5	2.4 & 5 (Dual)					2.4 & 5 & 5 (Tri)	



## ✓ ETHERNET OVER POWER

### N300 WI-FI ETHERNET-OVER-POWER KIT

This brilliant device makes Wi-Fi range extension literally plug and play. It uses your existing mains wiring to extend (or create) your wireless network. Simply plug the main unit into mains power and an ethernet cable from your router. Place the wireless unit in another part of the home or office, and you'll have a new wireless network in seconds! It will work using up to about 300m of power cable, which is more than enough to cover most homes, or a small office. Saves time and money avoiding new data cables, and provides high quality local Wi-Fi signal. Quality N300 Wi-Fi for up to 300Mbps data speeds.

**WAVLINK®**



SPECIFICATIONS	YN-8357
Interface	1 x 10/100 LAN Port
Power	240VAC
Standards	Cable: IEEE802.3, IEEE802.3u, IEEE802.3ab, Wireless: IEEE 802.11n/g/b
Frequency Range	2.4GHz
Signal Rate	Mains: 500Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Security	Cable: 128-bit AES, Wi-Fi: WEP, WPA/WPA2, WPA-PSK/WPA2-PSK
Range	Mains Range 300m
Dimensions	75(H) x 66(D) x 59(W)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
N300	YN-8357	\$149.00	\$133.95	\$118.95

### AV1000 GIGABIT ETHERNET-OVER-POWER KIT

Where sockets are at a premium, the TL-PA7010P KIT with an integrated AC pass-through power socket, means the powerlines can be used like a traditional electrical socket. Plug your smart TV or games consoles into the powerlines, as if it were a normal plug socket. No socket needs to go to waste. The built-in noise filter helps to prevent electrical signal noise from affecting powerline performance. Coming with advanced HomePlug AV2 technology, TL-PA7010P KIT provides users with high-speed data transfer rates of up to 1000Mbps, which is ideal for bandwidth intensive applications such as multiple HD/3D/4K video streaming, online gaming and large file transfers.

- HomePlug AV2 standard compliant, high-speed data transfer rates of up to 1000Mbps, supports all your online needs
- Gigabit port provides secure wired networks for desktops, smart TVs or games consoles
- Plug and play, no configuration required
- Patented Power-Saving Mode automatically reduces power consumption by up to 85%

### ETHERNET-OVER-POWER KIT

There are many instances where running a dedicated Ethernet cable is not practical, desirable, or even possible. This well engineered unit allows you to extend your ethernet connection over already-installed mains power connections. Simply connect, pair, and go! Ethernet speeds up to 500Mbps allow HD streaming, fast file transfers, and more. Ideal for SmartTVs, old computers, and just about any ethernet requirements.



**WAVLINK®**

SPECIFICATIONS	YN-8355
Interface	1 x 10/100 LAN Port
Power	240VAC
Standards	IEEE802.3, IEEE802.3u, IEEE802.3ab
Signal Rate	500Mbps
Security	128-bit AES
Range	Mains Range 300m
Dimensions	58(W) x 73(H) x 90(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8355		\$119.00	\$106.95	\$94.95



SPECIFICATIONS	YN-8442
Interface	1 x 10/100/1000 LAN Port
Power	240VAC
Standards	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE 1901
Signal Rate	1000Mbps
Security	128-bit AES
Range	Mains Range 300m
Dimensions	126(H) x 70(W) x 42(D)mm

	CAT.	Qty 1+
TPLINK AV1000 (TL-PA7010P KIT)	YN-8442	\$139.00

### AC1200 WI-FI ETHERNET-OVER-POWER KIT

Your PL-AC56 Kit is the easy, instant way to extend your wired and Wi-Fi networks to hard-to-reach areas of your home. PL-AC56 Kit uses 1200Mbps HomePlug® AV2 powerline technology integrated with 1200Mbps AC1200 Wi-Fi to extend fast wired and wireless networking anywhere in your home via existing electrical wiring.

Simply plug it in and enjoy fast, stable connections for all your devices – with no cable mess!

- Powerful 1200Mbps HomePlug® AV2 powerline connectivity with 1200Mbps dual-band AC1200 Wi-Fi MIMO range extender.
- Flexible connectivity for multiple devices via powerline, three Ethernet LAN ports and Wi-Fi.
- Plug-and-play setup with easy Wi-Fi network cloning.
- Encrypted pairing blocks unauthorized devices for protected security.
- Integrated power socket ensures the power outlet is wasted.

SPECIFICATIONS	YN-8434
Interface	3 x 10/100/1000 Ports, 1 x 10/100/1000 port
Power	240VAC
Standards	Cable: IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE 1901, Wireless: IEEE 802.11ac/n/g/b
Signal Rate	2.4GHz & 5GHz
Signal Rate	Mains: 1200Mbps, 11ac: Up to 867Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Security	Cable: 128-bit AES, Wi-Fi: WEP, WPA/WPA2, WPA-PSK/WPA2-PSK
Range	Mains Range 300m
Dimensions	152(H) x 80(W) x 44(D)mm



	CAT.	Qty 1+
ASUS AV-2 (PL-AC56 KIT)	YN-8434	\$279.00



## WIRELESS NETWORK ADAPTORS

## N150 NANO USB 2.0 WIRELESS NETWORK ADAPTOR

They don't get much smaller than this. Excluding the USB plug, this wireless-N network adaptor measures in at an astounding 5mm wide. It's the ultimate in discrete networking and perfect for the PC, laptop, or netbook.

- Compatible with 802.11n/g/b networks
- Transfer rate up to 150Mbps
- Supports 64/128-bit WEP, WPA (TKIP with IEEE 802.1x), WPA2 (AES with IEEE 802.1x)
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, Mac OS® 9.0-10.8, Linux
- Dimensions: 15(L) x 5(W) x 17(D)mm



WAVLINK® WARRANTY

SPECIFICATIONS	YN-8309
Wireless Standards	IEEE 802.11n/g/b
Frequency Range	2.4GHz
Signal Rate	11n: Up to 150Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64-bit WEP, 128-bit WEP, WPA2-PSK, WPA-PSK, WPA-Enterprise, WPA2-Enterprise
Dimensions	15(L) x 5(W) x 17(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
N150	YN-8309	\$19.95	\$17.70	\$15.70

## N300 MINI USB 2.0 WIRELESS NETWORK ADAPTOR

Add 802.11n wireless capability to your computer. Supports transfer speeds up to 300Mbps and is part of the 802.11n standard. A secure, sleek and convenient networking upgrade for the home or office.

- Security: 64/128bit WEP encryption
- WPA/WPA2 and WPA-PSK/WPA2-PSK encryption
- Wi-Fi protected setup (WPS)
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, Mac OS® 9.0-10.8, Linux
- Dimensions: 58(L) x 26(W) x 9(H)mm



WAVLINK® WARRANTY

SPECIFICATIONS	YN-8307
Wireless Standards	IEEE 802.11n/g/b
Frequency Range	2.4GHz
Signal Rate	11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64-bit WEP, 128-bit WEP, WPA2-PSK, WPA-PSK, WPA-Enterprise, WPA2-Enterprise
Dimensions	58(L) x 26(W) x 9(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
N300	YN-8307	\$24.95	\$22.35	\$19.70

## AC600 USB DUAL BAND WIRELESS NETWORK ADAPTOR

This is an ultra compact Wi-Fi dongle, ideal for notebook computers being moved around and where a larger dongle may be easily knocked and damaged. While many devices now have built-in Wi-Fi, there are many of us with hardware not Wi-Fi equipped, or specialised equipment which doesn't include it either. Dual band connection offers fast and stable access to just about any Wi-Fi signal, and is compatible with Windows and Mac systems.

- Dual band 2.4GHz and 5GHz
- Up to 433Mbps data rate



WAVLINK® DUAL BAND WARRANTY

SPECIFICATIONS	YN-8334
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 433Mbps, 11n: Up to 300Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64-bit WEP, 128-bit WEP, WPA2-PSK, WPA-PSK, WPA-Enterprise, WPA2-Enterprise
Dimensions	15(W) x 7(H) x 27(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
AC600	YN-8334	\$39.95	\$35.95	\$31.95

## AC1300 USB DUAL BAND WIRELESS NETWORK ADAPTOR

Similar to the YN-8334 AC600 dongle opposite but provides a greater range and speed. A powerful internal antenna and dual band connection offers fast and stable access to just about any Wi-Fi signal, and is compatible with Windows and Mac systems.

- Dual band 2.4GHz and 5GHz
- Up to 1300Mbps data rate



WARRANTY

WAVLINK®



SPECIFICATIONS	YN-8336
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 867Mbps, 11n: Up to 400Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64-bit WEP, 128-bit WEP, WPA2-PSK, WPA-PSK, WPA-Enterprise, WPA2-Enterprise
Dimensions	28(W) x 98(H) x 10(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
AC1300	YN-8336	\$69.95	\$62.95	\$55.95

## AC1900 USB DUAL BAND WIRELESS NETWORK ADAPTOR

The ASUS USB-AC68 is a dual-band USB Wi-Fi adapter that instantly upgrades your desktop or laptop to the novelist 802.11ac technology with Wi-Fi speeds up to 1300 Mbps (5GHz) and 600 Mbps (2.4GHz).

Its 3x4 MIMO antenna design with ASUS AiRadar Beamforming optimize the Wi-Fi reception, and the 3-position antennas and the cradle make it convenient to adjust for the best performance according to your usage- on desktop, on laptop, or on the go!

The USB 3.0 interface eliminates the potential bottleneck for your Wi-Fi and ensures the best performance you can get.

- Instantly upgrade your PC or laptop to dual-band AC1900 Wi-Fi!
- Powerful 3x4 MIMO design with dual 3-position external antennas and ASUS AiRadar beamforming for outstanding Wi-Fi reception
- USB 3.0 interface for up to 10X-faster data-transfer speeds
- Includes cradle for flexible positioning to achieve the very best performance



ASUS®



WARRANTY

SPECIFICATIONS	YN-8436
Wireless Standards	IEEE 802.11ac/n/g/b
Frequency Range	2.4GHz & 5GHz
Signal Rate	11ac: Up to 1300Mbps, 11n: Up to 400Mbps, 11g: Up to 54Mbps, 11b: Up to 11Mbps
Wireless Security	64-bit WEP, 128-bit WEP, WPA2-PSK, WPA-PSK, WPA-Enterprise, WPA2-Enterprise
Dimensions	115(H) x 30 (W) x 17(D)mm

	CAT.	Qty 1+
ASUS USB-AC68	YN-8436	\$139.00

## USB 2.0 BLUETOOTH® V4.0 CLASS 2 DONGLE

Connect a wide variety of popular Bluetooth® devices to your PC, including modern Bluetooth® Low Energy devices.

- Bluetooth® V4.0 Class 2 (also Bluetooth® 2.1 + EDR)
- Transfer rate: 3Mbps
- Supports BLE
- RoHS compliant
- Plug & Play
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000



Bluetooth® Transmitter &amp; Receiver see page 446

Bluetooth® WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
Class 2 Bluetooth®	XC-4956	\$24.95	\$22.45	\$19.95



To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

## ✓ ETHERNET SWITCHES

### 8-PORT NETWORK SWITCHES

Easily create or expand your wired network. It features everything you'd expect including MAC address auto-learning & ageing, half and full duplex (fully automatic), all in a compact desktop unit. Port and power LEDs for activity and power indication. YN-8380 includes mains adaptor and USB lead.

- Plug and Play
- Fanless quiet operation
- 1.6Gbps backplane bandwidth



**WAVLINK** WARRANTY

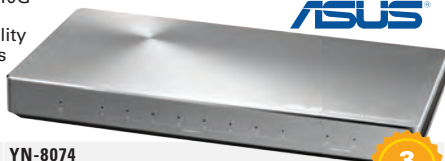
SPECIFICATIONS	YN-8380	YN-8382
Data Rate	10/100Mbps	10/100/1000Mbps (Gigabit)
Interfaces	8 x RJ45	
Input Power	100-240VAC @ 50/60Hz	
Power Consumption	5VDC @ 0.8A (4W approx.)	
Dimensions	140(W) x 76(D) x 27(H)mm	

	CAT.	Qty 1+	Qty 4+	Qty 10+
10/100Mbps	YN-8380	\$29.95	\$26.95	\$23.95
10/100/1000Mbps (Gigabit)	YN-8382	\$64.95	\$58.45	\$51.95

### 10-PORT ETHERNET SWITCH WITH TWO 10GBPS PORTS

Each of the two 10G ports delivers up to 10Gbps speeds via standard RJ-45 cables. This gives your office or studio network the bandwidth to cope easily with even the most data-intensive tasks, such as backing up to a NAS or transferring huge files. There are also 8 Gigabit Ethernet ports for the ultimate versatility.

Enjoy true plug-and-play convenience, with absolutely no setup required! Each port automatically configures itself depending on the type of device you connect, and the 10G ports include a handy three-color signal quality indicator LED that tells you what speed the cable supports.



**ASUS**

SPECIFICATIONS	YN-8074
Data Rate	100/1000Mbps, 10Gbps
Interfaces	8 x 100/1000Mbps, 2 x 10GBASE-T 10Gbps ports
Input Power	12VDC @ 1.5A (Mains adaptor included)
Standards	IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000BASE-T, IEEE 802.3an 10GBASE-T
Dimensions	240(L) x 125(W) x 27(H)mm

	CAT.	Qty 1+
ASUS XG-U2008	YN-8430	\$389.00

## ✓ POWER OVER ETHERNET

### POE POWER SPLITTERS

What if your device doesn't support PoE, but your network switch provides the functionality? These devices split the PoE into a regular ethernet plug and power plug. Giving you 12V (YN-8414) to power small network switches, IP cameras etc; or 5V (YN-8416) to power devices like Raspberry Pi or Arduino®.



SPECIFICATIONS	YN-8414	YN-8416 NEW
PoE Voltage Input	44-57V	
Voltage Output	12VDC @ 1.25A Max	5VDC @ 2.4A Max
Connectors	1x RJ45 PoE socket 1x RJ45 ethernet plug 1x DC plug	1 x RJ45 PoE Socket 1 x RJ45 Ethernet Plug 1 x Micro USB Plug
PoE Standard	IEEE 802.3af	
Data Rate	10/100Mbps	
Dimensions	35(W) x 50(D) x 30(H)mm	88(L) x 30(W) x 26(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
12V DC Plug	YN-8414	\$19.95	\$17.95	\$16.95
5V Micro USB Plug NEW	YN-8416	\$29.95	\$26.95	\$23.95

### GIGABIT POE INJECTOR

Most conventional ethernet switches do not natively support PoE. This device adds the power inline to a single network cable, working up to 100m, so you don't need mains power down the line at the device. It supports up to gigabit network throughput for ultra-fast connectivity, and is PoE IEEE 802.3at compliant.

SPECIFICATIONS	YN-8040
Input	1 x RJ45, 1 x AC Power Input
Output	1 x RJ45
Network	Gigabit up to 100m
PoE Output Power	52W @ 30W max
PoE Standard	IEEE 802.3at
Input Voltage	100-240VAC
Power Demand	35W max
PoE Power Supply End-Span	1/2,3/6 spare line pair (default); mid-span: 4/5, 7/8 data line pair (can be customised)
Dimensions	118(W) x 60(D) x 38(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	YN-8040	\$59.95	\$53.95	\$47.95

### 5 PORT POE SWITCH

Reduces the need for mains power at each IP camera location, for instance, powering them from a central supply. Suitable for use up to 100m, it provides up to 30W per PoE port.



SPECIFICATIONS	YN-8074
Ports	1 x 10/100 RJ45 4 x 10/100 RJ45 High Power PoE
PoE Port Power	30W (per port)
Max Combined PoE Power	65W
Backplane Bandwidth	1.6Gbps (non-blocking)
Max PoE Distance	100m
Network Protocols And Standards	IEEE 802.3i 10BASET, IEEE 802.3u 100BASETX IEEE 802.3x Flow Control, IEEE 802.3af DTE Power via MDI IEEE 802.3at
Power Input	100-240VAC @ 50/60Hz
Dimensions	118(W) x 85(D) x 27(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
10/100Mbps	YN-8074	\$119.00	\$106.95	\$94.95

### 10 PORT GIGABIT POE NETWORK SWITCH

This is a powerful gigabit switch with 8 x PoE-enabled and 2 x standard gigabit ports. It can deliver up to 130W of power (max 30W to a single port), which is loads of power for just about any PoE-enabled device you may have. Ultra-fast gigabit network also enables fast data transfer, critical for high resolution IP cameras and data-intensive systems, and is also very useful for providing PoE to access points and switches which are also distributing the connection. Automatic PoE detection, fully compatible with non-PoE devices. Includes mains power adaptor and mounting bracket.



SPECIFICATIONS	YN-8049
Ports:	8 x PoE (RJ45) 2 x Uplink (RJ45)
Power Output:	30W Per Port (Max) 15.4W Per Port (Across 8 Ports) 130W (Total)
PoE Standards:	IEEE 802.3at, IEEE 802.3af
Network Speed:	10/100/1000Mbps
Transmission Distance:	Up to 100m
Power Supply:	52VDC, 2.5A
Dimensions:	189(W) x 102(D) x 28(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
	YN-8049	\$229.00	\$199.00	\$189.00

### POWER-OVER-ETHERNET (POE) PASSIVE KIT

Simply connect a plugpack of the required voltage via the 2.1mm DC connector, then tap it where you need it at the other end.

- Input/Output Voltage: 5/12/24/48VDC
- Output Current: 1.5A
- PoE Output Power: 15.4W
- Transmission Distance: Up to 100m
- Dimensions: 48(L) x 20(W) x 23(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	YN-8410	\$14.95	\$13.45	\$11.95



## ✓ NETWORKING ACCESSORIES

### USB 2.0 NETWORK ADAPTOR WITH 3 PORT HUB

For ultrabooks, Macbook Air® and Tablets where USB ports are sparse or RJ-45 network ports are nonexistent. Simply connect a network cable to this device and you have a 10/100Mbps network adaptor. It also serves as a 3 port hub to connect peripherals such as a mouse, webcam, and keyboard. USB 2.0 and USB Type-C versions available to suit your requirements.

- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 96(L) x 24(W) x 16(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	YN-8407	\$24.95	\$22.35	\$19.70
USB 3.0 Type-C	YN-8409	\$39.95	\$35.90	\$31.90

### USB 3.0 GIGABIT ETHERNET CONVERTER WITH TYPE-C ADAPTOR

Modern Apple® MacBook® and Ultrabooks™ aren't able to connect to the internet using a LAN cable, as there is no LAN port provided. This converter provides a solution by converting a USB port to an ethernet port. With the combination of USB 3.0 and Gigabit ethernet, it maximizes the data transfer speed. A USB 3.0 Type-C adaptor is included so you can switch between Type-C and Type-A depending on the socket of your MacBook® or Ultrabook™.



SPECIFICATIONS	YN-8412
Interface	USB 3.0 Type-A, USB 3.0 Type-C Adaptor
Network Connection	RJ45, 10/100/1000Mbps
Network Support	IPv4 / IPv6
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, Mac OS X® 10.0+, Linux
Dimensions	70(L) x 30(W) x 15(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0 Type-C	YN-8412	\$54.95	\$49.45	\$43.90



WARRANTY

## ✓ ANTENNAS AND ADAPTORS

### 2.4GHZ WIRELESS NETWORKING ANTENNAS

Want to get a longer range in your wireless network? Here's a quick and inexpensive way to improve the range at either your base station or terminal. These antennas are specifically designed for 2.4GHz applications and 802.11 wireless networking is an ideal application. This rubber antenna is a dipole design and features a detachable base. Supplied with a 1.5 metre lead terminated to a reverse SMA connector. Both models supplied with a detachable magnetic base. See our adaptors section for conversions if needed.

SPECIFICATIONS	BOTH MODELS
Frequency Range	2.4GHz
Impedance	50 ohm
Polarisation	Vertical



GAIN	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
5dBi	195mm	AR-3273	\$19.95	\$17.95	\$15.95
11dBi	380mm	AR-3277	\$39.95	\$35.90	\$31.90

### 5/5.8GHZ WIRELESS NETWORKING ANTENNAS

Improve your wireless signal of your existing wireless AC (802.11ac) modem/router by attaching these 5GHz networking antennas. Supplied with a 1.5m lead terminated to a reverse SMA connector and a detachable magnetic base.



SPECIFICATIONS	AR-3286	AR-3288
Gain	5dBi	9dBi
Directionality	Omni directional	
Frequency Range	5.5 - 5.85GHz	
Dimensions	220mm long	390mm long

GAIN	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
5dBi	220mm	AR-3286	\$24.95	\$22.50	\$19.95
9dBi	390mm	AR-3288	\$39.95	\$35.90	\$31.90



WARRANTY

### 3G ANTENNAS - 800 TO 2100MHZ WITH FME CONNECTOR

Using 3G wireless internet in certain areas may require the help of an antenna to boost the signal for a reliable flow of data. Both of these antennas feature a very strong magnetic base so you can fix it to the roof of your car or any other steel surface. They both support frequency ranges of 850,1800 and 2100MHz. The cable is terminated with an FME connector.

- 5dBi 2m Cable Cat AR-3310
- 7dBi 3m Cable Cat AR-3312



WARRANTY

See our full range of SMA connectors & adaptors on page 188

GAIN	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
5dBi	290mm	AR-3310	\$49.95	\$44.90	\$39.90
7dBi	950mm	AR-3312	\$69.95	\$62.95	\$55.95

### 3G 7DBI 850 - 2100MHZ FIBREGLASS ANTENNA

Built for maximum range and performance, the antenna is required if you need a reliable 3G/4G signal while on the road. It comes with a 5m cable with FME connector to suit a range of popular wireless devices and mobile car kits.



WARRANTY

SPECIFICATIONS	AR-3311
Supports	GSM, CDMA, UMTS
Frequency	850 - 2100MHz
Gain	7dBi
Cable	5m RG58a/u
Suits	Trucks, Cars, 4WDs
Dimensions	747(L) x 18(Dia.)mmv

GAIN	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
7dBi	747mm	AR-3311	\$129.00	\$115.95	\$102.95

### SMA ADAPTORS & LEADS

Boost the reception on your 3G/4G USB modem or mobile phone - great if you live in or travel to rural areas. The adaptors plug into the antenna socket on your USB modem to extend the signal range. For devices without an SMA connection use the AR- 3330 induction adaptor.



WARRANTY

TYPE	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
Induction 3G Plug	510mm	AR-3330	\$16.95	\$14.95	\$13.35
Huawei E160/618 Plug	500mm	AR-3332	\$16.95	\$14.95	\$13.35
Sierra TS9 Plug	500mm	AR-3334	\$16.95	\$14.95	\$13.35
Telstra 4G USB Modem	490mm	AR-3336	\$16.95	\$14.95	\$13.35
Low Loss SMA Extension	5m	WC-7824	\$34.95	\$31.45	\$27.90

## ✓ WIRED NETWORK ACCESSORIES

### CAT5 UTP SPLITTER

Cat5 splitters enable two different devices to share the same Cat5 cable. They are usually used in pairs, one at each outlet. Please note: you can't use this device to run two computers from one network port: you'll need a network switch for that. This product is unsuitable for gigabit networks.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	YT-6090	\$16.95	\$14.95	\$13.35

### BNC TERMINATOR PLUG

To terminate BNC sockets.

- Built-in 50Ω resistor



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PP-0655	\$4.95	\$4.45	\$3.90

## CAT5/6 CABLES AND TESTERS

### CAT5E PATCH LEADS

RJ45 to RJ45.  
• 350MHz stranded cable



For full range of Wallplates and Keystones see page 331

COLOUR	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
Blue	0.5m	YN-8200	\$3.25	\$2.90	\$2.60
Blue	1.0m	YN-8201	\$3.95	\$3.45	\$3.15
Red	1.0m	YN-8211	\$3.95	\$3.45	\$3.15
Yellow	1.0m	YN-8221	\$3.95	\$3.45	\$3.15
Green	1.0m	YN-8231	\$3.95	\$3.45	\$3.15
Blue	2.0m	YN-8202	\$5.25	\$4.60	\$4.15
Red	2.0m	YN-8212	\$5.25	\$4.60	\$4.15
Yellow	2.0m	YN-8222	\$5.25	\$4.60	\$4.15
Green	2.0m	YN-8232	\$5.25	\$4.60	\$4.15
Blue	3.0m	YN-8203	\$6.95	\$6.25	\$5.50
Blue	5.0m	YN-8204	\$8.95	\$7.95	\$6.95
Blue	10.0m	YN-8205	\$14.95	\$13.35	\$11.70
Blue	15.0m	YN-8206	\$21.95	\$19.70	\$17.35
Blue	20.0m	YN-8207	\$24.95	\$22.35	\$19.70
Blue	30.0m	YN-8208	\$37.95	\$33.95	\$30.45

### 2 IN 1 NETWORK CABLE TESTER & DMM

This innovative device is ideal for network installers or technicians and will allow the user to easily check cable integrity or measure AC & DC voltage, current, resistance, and continuity etc. without needing to carry two separate devices. The unit will check for cable continuity, open-circuits, short-circuits, and cross-connects etc. A remote terminator is included and enables the user to check network cables at a wall jack or patch panel. Supplied with loop back cable, LAN terminator, and multimeter leads.

#### LAN Tester Specifications:

- LAN tester checks faults
- Mis-wired conductors
- Manual or automatic testing

#### DMM Specifications:

- 600 volt max input
- 200mA AC/DC
- 20M ohm resistance
- 3.5 digit
- Diode test
- Data hold
- Max hold



Full specifications on page 248



CAT.	Qty 1+	Qty 4+	Qty 10+
XC-5078	\$84.95	\$76.45	\$67.95

### 4P/6P/8P/ MODULAR CRIMP TOOL WITH NETWORK/POE TESTER

Designed for a wide range of telecom and network, security, and residential structured wiring, and professional applications. After crimping a modular connector, it enables you to quickly and easily test Ethernet twisted pair cable located on the handle of the tool for wiring continuity, opens, shorts, and mis-wires. With a single press on the TEST button, it will test the cable and gives the result of pin to pin configuration of the cables. The tester can also clip out of the housing and can be used as a general network tester. The tool is steel framed with PVC handles and rust resistant black oxide finish. The device also includes a PoE (Power-over-Ethernet) finder to check if a voltage is present on a port or cable you are testing. Supplied with a carry pouch that can directly worn on your belt.

- Testing for both UTP and STP cable
- Testing cable for continuity, opens, shorts, mis-wires
- Pin to pin indication
- Single and multi-wired cable crimping
- Integrated cable stripper and cutter
- Crimping tool and cable tester in one
- Detachable cable tester



TESTER UNIT	TH-1939				
Display Method	LED				
Battery Low	LED flash indicator				
Power Supply	4.5VDC (Includes 3 x LR-44 (SB-2950) type batteries)				
CRIMPER UNIT					
Suitable For	89, 6P, 4P				
Dimensions	195(L) x 65(W) 23(D)mm				
		CAT.	Qty 1+	Qty 3+	Qty 6+
		TH-1939	\$69.95	\$62.95	\$55.95

### CROSSOVER ETHERNET CABLES

Crossover cable eliminates the need for a hub when connecting two computers.

COLOUR	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
Black	2.0m	YN-8272	\$6.50	\$5.75	\$4.95
Black	5.0m	YN-8274	\$10.95	\$9.85	\$8.75
Black	10.0m	YN-8275	\$16.95	\$15.25	\$13.55

### CAT 6A PATCH CABLES

Upgrade your home or office network to speeds up to 10Gbps. Will drastically reduce bottlenecks in file transfers, improve daily redundancy routines on networked drives, and lower crosstalk which is more prevalent in business environments.

- Blue sheathed
- All models are ACMA approved



	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	YN-8292	\$3.95	\$3.45	\$3.15
1m	YN-8293	\$4.95	\$4.45	\$4.00
2m	YN-8294	\$7.95	\$7.15	\$6.35
3m	YN-8295	\$9.95	\$8.75	\$7.75
5m	YN-8296	\$14.95	\$13.45	\$11.95
10m	YN-8297	\$24.95	\$22.45	\$19.95
20m	YN-8298	\$34.95	\$31.45	\$27.95
30m	YN-8299	\$44.95	\$40.45	\$35.90

### MINI NETWORK CABLE TESTER WITH POE FINDER

Tests UTP/STP/Coaxial/Modular network cables by manually or automatically detecting missing or disordered wiring, and open or short circuits. It can quickly read the correct pin configuration of 10Base-T cable, 10Base-2 cable, RJ45/RJ11 modular cables, 258A, TIA-568A/568B and Token Ring cable etc. by comparing one transmitting end to the corresponding receiving end. Supplied in a plastic case and with a PoE (Power-over-Ethernet) Finder that indicates if the network port or cable has power.

#### Package Contents:

- 1 x Main Tester Unit with Terminator
- 1 x PoE Finder
- 2 x BNC Adaptor Cables
- 1 x BNC Male/Male Adaptor
- 3 x RJ45 to RJ11 Adaptors

#### Specifications:

- 9V battery required (use Cat. SB-2423)
- Dimensions:  
Main unit: 80(L) x 55(W) x 22(D)mm  
Remote terminator: 80(L) x 25(W) x 23(D)mm  
PoE finder: 80(L) x 25(W) x 23(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
XC-5084	\$39.95	\$35.90	\$31.90

### NETWORK CABLE TRACER

Network Cable Tracer This tone generator is a highly practical network installation and troubleshooting tool which features a single/multi tone signal, test leads and a 4 conductor modular cable. The signal emitted by the tone generator can be easily traced by the companion probe, even when cables are in a bundle or hidden in punch down blocks or wall plates. The generator can also be used for checking telephone line polarity and status ie. Ring/Busy/Idle. The probe is equipped with an insulated inductive pick up and will amplify the tone signal to an audible level. A LED is also included as a visual indicator. The probe has a volume control and either indicator can be switched off if desired.

- The tone generator measures:  
115(L) x 60(W) x 30(D)mm
- The signal leads are 185mm long & terminated with alligator clips
- The modular lead is 250mm long & terminated a 4 pin RJ12 plug
- The probe is 205mm long and approximately 35(H) x 35(D)mm
- Both units operate from a 9 volt batteries (sold separately) Use our Cat. SB-2423
- Supplied in a protective zip up vinyl case



CAT.	Qty 1+	Qty 4+	Qty 10+
XC-5083	\$99.95	\$89.95	\$79.95



## ✓ 19" RACK MOUNT CABINETS & ACCESSORIES

### 19" RACK MOUNT CABINETS

Ideal for studios, PA, sound reinforcement, IT, or phone systems installations, with a size and configuration to suit any application. Coupled with our wide range of accessories and options, these 19" rack cabinets offer outstanding features. All come in 1.8mm solid steel powder coated cabinets with clear tempered glass doors.

The sides can be removed for installation or maintenance access and all panels are key-lockable.

- High strength and rigidity under load
- Contemporary design
- Lift off side panels
- Top or bottom cable entry
- Cooling fan hole
- Camlock closures
- Front, sides and back lock separately
- Wall mounting without brackets
- Static loading capacity 60kg



**6U**

Available flat packed or assembled

Dimensions: 530(W) x 360(H) x 450(D)mm

Flat Packed: Cat HB-5170

Assembled: Cat HB-5171

**12U**

Dimensions: 530(W) x 626(H) x 450(D)mm CAT. HB-5174

### SWING FRAME RACK MOUNT ENCLOSURE

Swing frame enclosures allow you to access the rear of your rack system for maintenance or easier installation. Tempered glass doors and locking panels all round. 6 or 12 unit enclosures available.

**6U**

- Dimensions: 600(W) x 380(H) x 610(D)mm

CAT. HB-5180

**12U**

- Dimensions: 600(W) x 630(H) x 610(D)mm

CAT. HB-5182



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
6U Rack Mount - Flatpacked	HB-5170	\$179.00	\$160.95	\$142.95
6U Rack Mount - Assembled	HB-5171	\$199.00	\$178.95	\$158.95
12U Rack Mount - Flatpacked	HB-5174	\$239.00	\$209.00	\$189.00
6U Swing Frame Rack Mount	HB-5180	\$269.00	\$239.00	\$209.00
12U Swing Frame Rack Mount	HB-5182	\$349.00	\$309.00	\$279.00

### RACK CABINET PANELS

Quality brushed anodised panels with a black finish.



FINISH	SIZE		CAT.	Qty 1+	Qty 4+	Qty 10+
Black	44mm	1U	HB-5404	\$16.95	\$14.95	\$13.35
Black	88mm	2U	HB-5405	\$24.95	\$22.35	\$19.70
Black	132mm	3U	HB-5406	\$29.95	\$26.95	\$23.95

### 19" RACK BLANK PANELS

Blank panels for filling in unused space or configuring panels to your own requirements. Black powder coated steel, 1 or 2 unit, vented or plain. The vented panels are also useful at the back of rack enclosures for attaching wiring looms to.

**1U BLANK**

- Dimensions: 483(W) x 45(H)mm

CAT. HB-5420

**1U BLANK VENTED**

CAT. HB-5424

**2U BLANK**

- Dimensions: 483(W) x 89(H)mm

CAT. HB-5422

**2U BLANK VENTED**

CAT. HB-5426



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
1U Blank Panel	HB-5420	\$10.95	\$9.85	\$8.75
2U Blank Panel	HB-5422	\$12.95	\$11.35	\$10.35
1U Vented Blank Panel	HB-5424	\$18.95	\$16.95	\$14.95
2U Vented Blank Panel	HB-5426	\$27.95	\$24.95	\$22.35

### PRO GRADE 19" RACK STYLE EQUIPMENT ENCLOSURES

Complies with IEC 297 / EIA RS- 310 C-1977 / DIN 41494 standards. Each cabinet is made from phosphated steel and coated with a dark grey enamel. The colour matched rack front panel is in 3mm aluminium with extruded handles (excluding 1U). The rear panel is aluminium as well. The top, bottom and sides of each cabinet are liberally punched with ventilation holes. All screw fasteners are metal thread - not self tappers. Top, bottom, front and rear of enclosure can be separately removed without affecting the integrity of the cabinet. Each enclosure comes with punched internal rail bars to facilitate PCB, transformer, filter capacitor etc, mounting independent of cover panels. Each cabinet also features an internal sub panel (in 1.5mm enamelled aluminium) which is adjustable from 0-20mm from the back of the front panel. This panel is ideal for mounting panel hardware (no screws need appear on front panel). Rear panel is also adjustable 0-20mm inwards.

- The entire cabinet is packed flat for convenient transport.
- Rubber mounting feet are provided



DIMENSIONS (MM)	1U	2U	3U	WARRANTY
Panel Height	44	88	133	
Cabinet Height	39	84	128	
Cabinet Depth	245	335	335	
Width	482.6	482.6	482.6	

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 unit enclosure	HB-5120	\$74.95	\$67.45	\$59.95
2 unit enclosure	HB-5125	\$119.00	\$106.95	\$94.95
3 unit enclosure	HB-5130	\$139.00	\$124.95	\$110.95

### RACK PANEL ACCESSORIES

A range of accessories to complete your rack system - blank panels for filling in space, vent panels and panels for fans or mic sockets, braked castors and feet for keeping it all where you want it. Panels are black powder coated steel, 1, 2 or 3 unit.

#### 1U 12 X XLR SOCKET PANEL

- Dimensions: 483(W) x 45(H)mm

Cat HB-5436

HB-5470



#### UNIVERSAL BRAKED CASTORS

- Ball bearing swivel castors
- Universal mounting plate
- Suitable for rack cabinets, speaker boxes, etc
- Sold as a set of 4
- Mount plate: 70(L) x 55(W)mm
- Wheel: 50(Dia) x 30(W)mm
- Overall Height: 75mm

CAT. HB-5470



WARRANTY

- Adjustable height
- M12 threaded shaft
- Supplied with locking nut
- Sold as a set of 4
- Suitable for rack cabinets, speaker boxes, etc
- Dimensions: 60(H) x 50(Dia.)mm

CAT. HB-5472

#### UNIVERSAL ENCLOSURE FEET

	CAT.	Qty 1+	Qty 4+	Qty 10+
1U XLR Socket Panel	HB-5436	\$12.95	\$11.35	\$10.35
Braked Castors - Set of 4	HB-5470	\$34.95	\$31.45	\$27.95
Adjustable Feet - Set of 4	HB-5472	\$19.95	\$17.95	\$15.95

### PATCH LEAD MANAGEMENT PANEL

Keeps all your patch leads under control.

- 1U size
- Removable cover plate



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
483(W) x 45(H) x 68(D)mm	HB-5434	\$29.95	\$26.90	\$23.70

### RACK MOUNT CAT 5E/6 PATCH PANELS

Sleek attractive looking rack mount 24 port patch panel with a hard metal exterior. Numbered ports and a labelling area for each port. Also comes with instruction stickers on the back for easier cabling. See our tool section for punch-down tools.

- Takes up 1 rack unit
- 24 port
- Numbered ports
- Labelling area
- Cat 5e or Cat6



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
24 Port - Cat 5e Panel	YN-8046	\$49.95	\$44.90	\$39.90
24 Port - Cat 6 Panel	YN-8048	\$69.95	\$62.95	\$55.95



## CONVERTERS & ADAPTORS

### USB TO DB9M RS-232 CONVERTER

This USB to 9 pin Serial (RS-232) converter allows a computer with a USB port to use any RS-232C serial device via the USB port. Suitable for digital cameras, modems, POS systems, ISDN terminal adaptors etc. The converter is powered by the USB port.

- Full compliance with USB specification 1.1(0)
- Over 1Mbps data transfer rate
- Support remote wake-up and power management
- Cable 1.5m long
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® 8.6+, Linux



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	XC-4834	\$29.95	\$26.95	\$23.95

### RS-232 DB9 TO USB CONVERTER

Connect a variety of legacy RS-232 devices to your modern computer with this simple adaptor.

- USB 1.1 compliant / Speed: Over 250kbps
- Remote wake-up and power management
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux



	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4927	\$27.95	\$24.95	\$22.35

### USB PORT TO RS-485/422 CONVERTER

The days of on-board communication ports other than USB are virtually just a memory now, but they're still very common. RS-485/422 is commonly found in thermal printers (eg, point of sale), modem communications, and more. This converter provides that connection from your modern USB port with great reliability.



SPECIFICATIONS	XC-4136
Baud Rate	300bps-921kbps
Standards	TIA/EIA RS-485/RS-422
Supports	Windows XP/Vista/7/8/8.1/10 (32/64-bit)/Linux/Mac OS

	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	XC-4136	\$49.95	\$44.95	\$39.95

### USB TO PARALLEL BI-DIRECTIONAL CABLE

This handy device replicates the old 25 pin printer socket and lets you use your legacy devices just like you would with a normal printer port. The USB interface provides up to 12Mbps data throughput, so printing is significantly faster compared with standard a parallel port (150kbps) connection.

- USB Printer Class Specification 1.0 compliant
- IEEE-1284 1994 (Bi-directional parallel interface)
- USB 1.1 Compliant A type male connector
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP
- Plug & Play support



	CAT.	Qty 1+	Qty 4+	Qty 10+
2m	XC-4847	\$39.95	\$35.90	\$31.90

### SERIAL TO ETHERNET CONVERTER

An ideal solution for people who need to monitor or access RS-232 based equipment remotely or to share them over a network. There is one 9-pin male RS-232 plug, an RJ-45 socket and a terminal block to wire up RS-485 or RS-422 connections. Can be accessed remotely through a simple web interface.



SPECIFICATIONS	XC-4134
Supports	10/100M
Converts	RS-232, RS-485 & RS-422
Dimensions	88(L) x 68(W) x 27(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4134	\$149.00	\$133.95	\$118.95

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!



## GENDER CHANGERS

### DB9

All Pins wired straight through.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Male/Male	PA-0900	\$5.95	\$5.25	\$4.75
Female/Female	PA-0901	\$5.95	\$5.25	\$4.75

### DB9 MALE TO FEMALE ADAPTOR - 90°

DB9 Male to DB9 Female



	CAT.	Qty 1+	Qty 4+	Qty 10+
DB9	PA-0908	\$5.95	\$5.25	\$4.75

### VGA PLUG TO SOCKET - 90°

VGA plug to socket right adaptor.

- Available with the socket angles up or down



	CAT.	Qty 1+	Qty 4+	Qty 10+
Angled Up	PA-0898	\$8.95	\$7.95	\$6.95
Angled Down	PA-0899	\$8.95	\$7.95	\$6.95

### DB25/DB9

D25 Female to D9 Male serial port adaptor.



	CAT.	Qty 1+	Qty 4+	Qty 10+
DB25F/DB9M	PA-0882	\$5.95	\$5.25	\$4.75

### DB15 HIGH DENSITY

All Pins wired straight through.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Male/Male	PA-0875	\$6.95	\$6.25	\$5.50
Female/Female	PA-0876	\$6.95	\$6.25	\$5.50

### "A" FEMALE TO "A" FEMALE



	CAT.	Qty 1+	Qty 4+	Qty 10+
Skt to skt	PA-0921	\$7.95	\$6.95	\$6.25

### "A" MALE TO PS/2 FEMALE



### "A" FEMALE TO PS/2 MALE

Colour may vary



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB Male	PA-0915	\$7.95	\$6.95	\$6.25
USB Female	PA-0917	\$7.95	\$6.95	\$6.25

### DB25 MALE TO RJ45 8 X 8 SOCKET

- Unwired



	CAT.	Qty 1+	Qty 4+	Qty 10+
DB25 Male	PA-0904	\$7.95	\$6.95	\$6.25

### DB9 SOCKET TO RJ45

Socket adaptor

- Unwired



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PA-0906	\$5.95	\$5.25	\$4.75

### DIGITAL VIDEO INTERFACE

Female to female

- Compatible with DVI-I single dual link, DVI-D single/dual link & DVI-A male
- All pins wired straight through



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PA-0896	\$14.95	\$13.35	\$11.70

### DVI-A PLUG TO VGA SOCKET

For connecting DVI-A or DVI-I video cards with VGA monitors.

Note: will not display digital video signal from a DVI-D output, even though the plug physically fits.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PA-0897	\$12.95	\$11.35	\$10.35



## Select Your Model: Computer Leads

Cat.	Connectors		Length	Quality	Page
<b>WC-7534</b>	DB9 Plug	DB9 Socket	1.8m	Best	314
<b>WC-7511</b>	DB9 Socket	DB9 Socket	0.5m	Best	314
<b>WC-7513</b>	DB9 Socket	DB9 Socket	1.8m	Best	314
<b>WC-7535</b>	DB9 Plug	DB9 Plug	1.8m	Best	314
<b>WC-7516</b>	DB25 Plug	DB9 Socket	1.8m	Best	314
<b>WC-7584</b>	DB26HD Plug + 3.5mm Stereo	DB26HD Plug + 3.5mm Stereo	1.8m	Good	314

Cat.	Connectors		Length	Quality	Page
<b>WC-7500</b>	DB15HD Plug	DB15HD Socket	1.8m	Good	314
<b>WC-7583</b>	DB15HD Plug	DB15HD Plug	0.5m	Good	314
<b>WC-7582</b>	DB15HD Plug	DB15HD Plug	1.8m	Good	314
<b>WC-7585</b>	DB15HD Plug	DB15HD Plug	0.5m	Best	314
<b>WC-7586</b>	DB15HD Plug	DB15HD Plug	2.0m	Best	314
<b>WC-7588</b>	DB15HD Plug	DB15HD Plug	5.0m	Best	314
<b>WQ-7258</b>	DB15HD Plug	DB15HD Plug	10.0m	Best	314
<b>WQ-7257</b>	DB15HD Plug	DB15HD Plug	15.0m	Best	314

### ✓ SERIAL CABLES

#### DB9 MALE TO DB9 FEMALE EXTENSION CABLE

All pins wired straight through.



CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m WC-7534	\$9.95	\$8.75	\$7.75

#### DB9 MALE TO DB9 MALE



CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m WC-7535	\$9.95	\$8.75	\$7.75

#### DB9 FEMALE TO DB9 FEMALE NULL MODEM



CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m WC-7511	\$6.95	\$6.25	\$5.50
1.8m WC-7513	\$11.95	\$10.70	\$9.50

#### SERIAL MODEM CABLE

DB25 Male to DB9 Female



CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m WC-7516	\$11.95	\$10.70	\$9.50

**Find Out More In Store:**  
Our staff offer friendly and helpful service. We're here to help.

### ✓ DVI VIDEO CABLES

#### DVI TO DVI VIDEO CABLE

- Can be used for DVI-A or DVI-D
- Male to Male
- 24 pin
- 2m



CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m WC-7590	\$29.95	\$26.95	\$23.95

#### DVI TO DVI VIDEO CABLE

- DVI to 15 pin HD VGA
- 2m



CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m WC-7594	\$24.95	\$22.35	\$19.70

### ✓ MONITOR CABLES

#### VGA MONITOR LEAD WITH 3.5MM AUDIO

1.8m VGA DB15HD to DB15HD lead. Includes a stereo 3.5mm plug at each end for audio transfer



CAT.	Qty 1+	Qty 4+	Qty 10+
WC-7584	\$16.95	\$14.95	\$13.35

#### VGA MONITOR EXTENSION

DB15HD Male to DB15HD Female



CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m WC-7500	\$11.95	\$10.70	\$9.50

#### VGA MONITOR CONNECTING CABLE

DB15HD Male to DB15HD Male



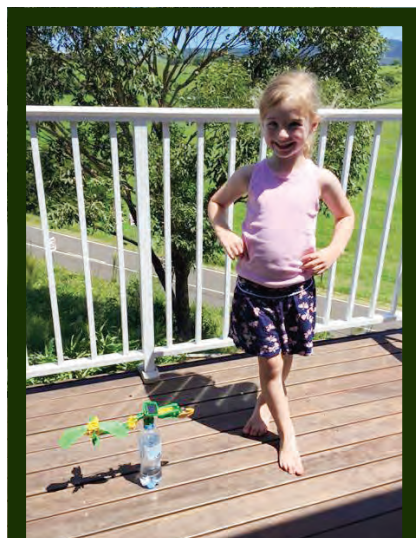
CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m WC-7583	\$6.95	\$6.25	\$5.50
1.8m WC-7582	\$11.95	\$10.70	\$9.50

#### XVGA MONITOR CONNECTING CABLES

- DB15HD male to DB15HD male
- Ferrite suppression on both ends
- Superior electrical screening



CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m WC-7585	\$8.95	\$7.95	\$6.95
2.0m WC-7586	\$18.95	\$16.95	\$14.95
5.0m WC-7588	\$39.95	\$35.90	\$31.90
10.0m WQ-7258	\$49.95	\$44.90	\$39.90
15.0m WQ-7257	\$69.95	\$62.95	\$55.95



### Smart Hardware Competition:

- ROB WESTON, SHOPS AT JAYCAR SHELLHARBOUR

"My 7 YO daughter build a Jaycar kit... teaching her early the joys of building stuff!"



## DISPLAY LEADS & ADAPTORS

### DISPLAYPORT TO DISPLAYPORT MALE LEAD

A DisplayPort lead primarily used to connect a video source to a display device such as a computer monitor.

- Supports DisplayPort V1.2



TYPE	LENGTH	HZ	CAT.	Qty 1+	Qty 4+	Qty 10+
Plug to Plug	1.8m	60	WQ-7450	\$19.95	\$17.95	\$15.70
Plug to Plug	3.0m	30	WQ-7452	\$29.95	\$26.95	\$23.70
Plug to Mini Plug	1.8m	30	WQ-7454	\$29.95	\$26.95	\$23.70

### MINI DISPLAYPORT TO VGA CONVERTER

Connect modern computers with a Mini DisplayPort to a conventional VGA display, such as CRT, LCD monitor or projector. Mini DisplayPort offers a unified, scalable, and cost effective interface for embedded and external display applications.

- Mini DisplayPort 1.1a compliant
- Supports up to 1080p, 1920 x 1200 video resolution



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WQ-7440	\$29.95	\$26.90	\$23.70

### MINI DISPLAYPORT CONVERSION LEADS FOR MAC®

Connect your Mac® to a high definition display with a mini display port conversion lead.

- Designed for Mac® computers
- Plug and play



TYPE	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
HDMI	1.8m	WQ-7442	\$29.95	\$26.90	\$23.70
HDMI	3.0m	WQ-7443	\$34.95	\$31.45	\$27.95
DVI	1.8m	WQ-7444	\$29.95	\$26.90	\$23.70

### UNIVERSAL HDMI CABLE FOR SMARTPHONES

Connect a large display to your smartphone quickly and easily. This ingenious device provides a USB plug for power (optional depending on your devices), HDMI plug to connect to the TV, and a USB socket. Simply connect your smartphone with its USB charge/sync cable to the USB socket, and you're ready to go! No longer are your cat videos confined to your smartphone screen! Compatible with modern iOS™ and Android devices, with no app installation required. Supports resolutions up to 1080p.

- Connect a mobile device to a HDMI screen
- Compatible with iOS 8™, Android 4.5, or higher



SPECIFICATIONS	WC-7650
Cable Length	2.7m
Dimensions	26(W) x 6(H) x 69(D)mm

	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
HDMI	2.7m	WC-7650	\$49.95	\$44.95	\$39.95

### USB TYPE-C TO HDMI CABLE 1.8M

Connect a HDMI display directly to your USB Type-C enabled device. Provides up to 4K resolution @ 30Hz, compatible with HDCP 2.2. Quality gold plated connectors. 1.8m long.



SPECIFICATIONS	WC-7950
HDCP	1.4, 2.2
HDMI	1.4, 4K HD
Cable Length	1.8m

	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
HDMI	1.8m	WC-7950	\$49.95	\$44.95	\$39.95



To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

### MINI DISPLAYPORT TO DISPLAYPORT/ HDMI/DVI CONVERTER

Combine several mini DisplayPort converters into one with this useful unit. Easily converts to high definition displays that take HDMI, DVI or DisplayPort. Fully powered from the mini DisplayPort of your input device. A useful tool to use with your Macbook Air® or other Apple® device when wanting to output to a large screen TV.

- Output types: DisplayPort Female Type A 20pin, HDMI Female Type A, DVI Female (24+1)
- Supports DisplayPort 1.1a
- HDMI can support audio output for iMac® and MacBook Pro®
- HDMI/DVI output up to 1920 x 1080p @ 60Hz
- Display it auto detected
- DisplayPort 1.1a Dual-mode output with max resolution of 2560 x 1600
- Lead length: 180mm
- Unit Dimensions: 78(L) x 44(W) x 15(H)mm



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
180mm	WQ-7427	\$39.95	\$35.90	\$31.90

### USB 3.0 TYPE-C TO DISPLAYPORT CONVERTER

This USB 3.0 Type-C to DisplayPort converter is designed to convert an existing DisplayPort signal to a new USB Type-C connector. This converter takes advantage of high performance USB Type-C connectors on new PC's and MacBooks® and doesn't need complicated drivers. Delivers up to 4 x 2K resolution depending on the application.

SPECIFICATIONS	XC-4971
Interface	USB 3.0 Type-C
Display Port	V1.2
Resolution	Up to 4 x 2K, 60Hz
Dimensions	43(L) x 43(W) x 13(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
180mm	XC-4971	\$59.95	\$53.95	\$47.95

### TYPE-C CONVERTERS

These USB 3.0 Type-C converters are designed to take advantage of high performance USB Type-C connectors on new PCs and Macs® to convert to an existing VGA, DVI and HDMI signal. These converters don't need complicated drivers and delivers up to 1080p resolution depending on the application.

	XC-4961	XC-4965
Interface	USB 3.0 Type-C, VGA 15 pin	USB 3.0 Type-C, HDMI V1.4B
Resolution	up to 1080p, 60Hz	up to 4 x 2K, 30Hz
Dimensions	43(L) x 43(W) x 13(D)mm	43(L) x 43(W) x 13(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
VGA	XC-4961	\$59.95	\$53.95	\$47.90
HDMI	XC-4965	\$59.95	\$53.95	\$47.90

### USB TYPE-C AV MULTIPOINT ADAPTOR

The USB Type-C AV multipoint adaptor lets you connect your MacBook®, Google Chromebook™ and other devices with a USB Type-C port to an HDMI display, while also connecting two USB devices and a USB Type-C power delivery charging port. This adaptor allows you to mirror your Type-C devices display to your HDMI enabled TV or monitor in up to 4K resolution. With a unique power delivery system, it enables an existing Type-C power supply to charge your laptop while the multipoint adaptor is connected. It recognised and adjusts the device's specific voltage requirement including 5, 12, 14.5 and 20V to support all laptops.

SPECIFICATIONS	XC-4967
Interface	USB 3.0 Type-C
Inputs	2 x USB 3.0 Type-A Ports 1 x USB 3.0 Type-C Power Delivery/Data Port
Output	1 x HDMI V2.0 @ 30Hz
Video Resolution	4 x 2K
USB Transfer Rate	up to 80Mbps
Power Delivery Profile	4 (20V, 3A Max)
Power Delivery Support	2.0 (V1.1)
Dimensions	81(L) x 52(W) x 15(H)mm



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4967	\$99.95	\$89.95	\$79.95





## WIRELESS DONGLE

### WI-FI HDMI MIRACAST DONGLE - V2.0

Plug the Anycast dongle into your TV's HDMI port and begin streaming content from your smartphone, tablet or PC to your TV. It features a self-explanatory screen mirroring function as well as DLNA and Airplay® for an almost universal ability to stream media from a compatible device. Through the casting functionality, play YouTube, videos, pictures and an innumerable number of other streaming services straight on your TV. A great solution for those without smart TVs.

- Compatible with iOS®, Android & Windows/Mac®
- Free AllConnect or iMediaShare app from iTunes® or Google Play
- Stream or Mirror video and audio to any TV with HDMI
- Powered via USB Micro-B port

SPECIFICATIONS	AR-1922
Memory	128MB DDR3
Wi-Fi	802.11 b/g/n
Resolution	1080p, 720p
Media Sharing	Miracast, DLNA, Airplay® & Airmirror®
Operating System	Android 4.2+, iOS® 7.0 +, Windows, Mac OS® X
Dimensions	57(L) x 36(W) x 12(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AR-1922	\$54.95	\$49.45	\$43.95

## KVM SWITCH

### 2-PORT USB KVM SWITCH

Share your keyboard, monitor, mouse, and USB devices between two different computers. It doesn't end at your keyboard however, with a USB audio converter onboard so you can connect speakers/headphones and a micro-phone to the KVM too. But there's no additional cables needed, only VGA and USB are required to each computer. It features a physical pushbutton switch, as well as hotkey switching support. High resolution 2048 x 1536 display support ensures you're not limited to low-grade monitors either. Power is even supplied by the USB ports, so there's no power supply needed. Plug and play operation with no drivers required.



SPECIFICATIONS	YN-8402
Max Video Resolution	2048 x 1536 (> Full HD)
Switching Mode	Pushbutton / Hotkey Sequence
Operating Systems	Supports All Major Operating Systems
Dimensions	92(W) x 65(D) x 26(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Port	YN-8402	\$64.95	\$57.95	\$51.95

## SPLITTERS & SWITCHES

### 2 PORT VGA/AUDIO SPLITTER

Takes a computer's VGA and audio signal and sends it to two (2) analogue monitors and headphones/speakers. The same image is displayed on both monitors and identical audio streams are piped to each 3.5mm audio jack. The splitter provides fast, flexible solutions for test bench facilities, data centres or video broadcasting such as remote monitoring, presentations, education and stock quotes etc. Supports VGA, SVGA, XGA and Multi-Sync. Mains power adaptor included.

- Bandwidth up to 500MHz
- Resolution up to 1920 x 1200 and 1080p
- Transmit video/audio up to 15m
- Dimensions: 125(W) x 25(H) x 72(D)mm



See page 467 for HDMI AV Converter with Audio Output

	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Port Splitter	YN-8075	\$74.95	\$67.45	\$59.95

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.

## 2 WAY DISPLAYPORT SPLITTER

This splitter allows for a DisplayPort signal to be split to two different devices such as computer monitors, TV's or projector screens. DisplayPort can be used to transmit audio and video simultaneously, but each one is optional and can be transmitted without the other. HDMI and DVI output achievable with use of a passive adaptor or Mini DisplayPort with the use of an additional converter cable. Typically suited for small-scale use in the home, office, shop fronts or classrooms where only two duplicated displays are required. Compliant with VESA DisplayPort standard link rates of 1.62, 2.7 and 5.4Gbps. Includes a mains power adaptor.

SPECIFICATIONS	AC-1755
Input	1 x DisplayPort
Outputs	2 x DisplayPort
Resolution	up to 4X2K (4096 x 2160) @ 60Hz
DisplayPort	V1.2a
Audio	up to 7.1 Channel
Compliant	DP++, HDCP
Power	5VDC, 1A
Dimensions	71(L) x (61)W x 21(H)mm



	CAT.	Qty 1+
2 Way	AC-1755	\$49.95

## 2 WAY DISPLAYPORT SWITCHER

With the flick of a switch this product allows you to select from one of two DisplayPort sources to output to a single computer monitor, TV or projector. Suitable for when you want the flexibility of switching between two audio visual sources for the one display device. DisplayPort can be used to transmit audio and video simultaneously, but each one is optional and can be transmitted without the other. HDMI and DVI output achievable with use of a passive adaptor or Mini DisplayPort with the use of an additional converter cable. Typically suited for small-scale use in the home, office, shop fronts or classrooms where two sources need to be switched. Compliant with VESA DisplayPort standard link rates of 1.62, 2.7 and 5.4Gbps. Switching is operated manually on the front of the unit. Includes a mains power adaptor.

SPECIFICATIONS	AC-1757
Input	2 x DisplayPort
Outputs	1 x DisplayPort
Resolution	up to 4X2K (4096 x 2160) @ 60Hz
DisplayPort	V1.2a
Audio	up to 7.1 Channel
Compliant	DP++, HDCP
Power	5VDC, 1A
Dimensions	71(L) x (61)W x 21(H)mm



	CAT.	Qty 1+
2 Way	AC-1757	\$49.95

## VIDEO CONVERTERS

### COMPOSITE & S-VIDEO TO VGA VIDEO CONVERTER WITH VGA LOOP THROUGH

Connect a composite video or S-video source to a display monitor which only has VGA input. Ideal for connecting an old game console, VHS player, etc to your computer monitor or plasma TV. Features an on screen display where you can adjust resolution, picture mode, brightness, contrast, saturation and hue. Also has VGA loop through so you can have a computer and composite/S-video source connected to the same display.

- On screen display
- Supports PAL/NTSC
- Digital comb filter to prevent cross colouring
- Compatible resolutions:
  - 800 x 600 @ 60Hz/75Hz, 1024 x 768 @ 60Hz, 1280 x 1024 @ 60Hz, 1280 x 720 @ 60Hz, 1360 x 768 @ 60Hz, 1440 x 900 @ 60Hz, 1600 x 1200 @ 60Hz, 1680 x 1050 @ 60Hz, 1920 x 1080 @ 60Hz, 1920 x 1200 @ 60Hz
- Dimensions: 95(L) x 54(W) x 26(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4906	\$49.95	\$44.90	\$39.90



## Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!



## VIDEO CONVERTERS (CONTINUED)

### VGA TO COMPOSITE & S-VIDEO CONVERTER

A compact and versatile device that lets you use your wide screen plasma or LCD screen as a computer monitor for gaming or presentation use. The unit accepts a standard VGA input and generates both composite video and S-Video signal simultaneously, so you can watch and record the video signal at the same time or even send it over a video distribution system. Great for watching DVDs, gaming, presentations, or just having a big screen on your computer. The unit powered from the computer's USB port and has an on-screen setup menu to adjust the video output signal and picture size. No software is required.

- Supports composite video and S-video output
- Up to 1024 x 768 resolution
- Display on both PC and TV simultaneously
- Input and output leads included
- Powered from USB Port
- Dimensions: 90(L) x 70(W) x 25(H)mm



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4871	\$69.95	\$62.95	\$55.95

### MHL TO HDMI CONVERTER WITH 11 PIN SAMSUNG® ADAPTOR

Mobile High-Definition Link (MHL) is a new feature built into popular Smartphone and Tablet devices, which enables full HD 1080p video output from the Micro-B USB port. Connect this MHL to HDMI Converter to your HDTV (HDMI cable not included) to view full 1080p video at 30/60Hz or mirror everything on and from your MHL equipped device. Supplied with an 11 Pin Micro-B Adaptor for use on Samsung® S3/4 or Note 2. The converter requires USB power (power cable not included) which can connect to a USB power adaptor or from a USB port on an HDTV.

- Supports resolutions up to 1080p @ 30/60Hz
- Supports device mirroring
- Supports most Android Smartphones & Tablets
- Lead Length: 90(L)mm
- Dimensions: 53(L) x 28(W) x 11(H)mm



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 4+	Qty 10+
WQ-7424	\$24.95	\$22.35	\$19.70

### CONVERTER USB 3.0 TO DVI/VGA 1080P

This unit uses USB3.0 transmission and contains an effective processor for high definition images.

Connect multiple displays and extend your screen for multi-media and video conferencing.

- Add-on monitor, LCD or projector through USB3.0 Super-Speed connectivity
- Supports widescreen aspect ratio of 16:9 Full HD 1080P video streaming
- Supports resolutions up to 2048 x 1152 @ 32bit
- Up to four USB3.0 graphic adapters to work simultaneously
- Automatic recognition of monitor type, resolution, and features
- Hot-swapping / Plug-n-Play of monitors without reconfiguration
- Movement of windows on the desktop is smooth, with no trail or shuddering
- Compatible with power management hibernate and suspend modes
- Specialized for office using, home entertainment, and video playing
- Supports Windows XP / Vista / 7 / 8 / 8.1 / 10 (32/64-bit) and Mac OS



NEW 2018

CAT.	Qty 1+	Qty 4+	Qty 10
XC-4974	\$99.95	\$89.95	\$79.95

### USB 3.0 (AUDIO/VIDEO) TO HDMI CONVERTER

A great solution if your current PC has limited display outputs but you require more screen landscape. It also carries audio through to the HDMI output so you can turn your PC into a home theatre PC without audio sync issues.

- Supports 16:9 full HD 1080p video streaming
- Resolutions up to 2048 x 1152 @ 32 bit colour
- Supports desktop mirror, extend mode, multi-screen mode, & rotation mode
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, Mac OS X® 10.0+
- Dimensions: 275mm x 35mm x 15mm



1 YEAR WARRANTY

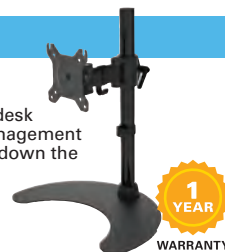
CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4973	\$109.00	\$97.95	\$86.95

## MONITOR BRACKETS

### PC MONITOR DESK STAND

Features a sturdy base designed to keep your desk clutter free and monitor at eye level. Cable management allows you to run your power and video leads down the structure of the stand to keep your workspace clear of cables.

- Black powder coated finish will ensure it doesn't get scratched too easily
- Supports up to an 8kg Monitor



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 5+	Qty 10+
CW-2876	\$79.95	\$71.95	\$63.95

### DUAL MONITOR DESK STAND

This desktop unit will accommodate two monitors up to 27" each with a combined weight up to 8kg. There's no clamp, just a large base to sit on the desk top, so it's suitable for glass / sensitive table-tops too. Supports 75mm and 100mm VESA mounts, and is height adjustable. Cable-tidy clips are provided to keep all those cables neat, and screen mounting hardware (spacers, screws, etc.) are also provided.



1 YEAR WARRANTY

SPECIFICATIONS	CW-2880
Monitor Size	13-27" each
Max Weight	8kg combined
Weight	4.3kg
Dimensions	Max Arm Span: 700mm, Height: 405mm

CAT.	Qty 1+	Qty 3+	Qty 6+
CW-2880	\$99.95	\$89.95	\$79.95

### PC MONITOR DESK BRACKET

Improve your workspace ergonomics and free up your desk area by suspending your display above your table. The flexible design clamps to the edge of the desk and offers an exceptional range of motion to position the monitor. Fits most 13 to 27 inch flat-screen displays with VESA compliant mount points and a maximum weight of 8kg. Includes all necessary mounting hardware to suit a variety of monitors.

- Adjustable tilt, swivel and rotation
- Cable management clips on arm
- Maximum arm height above table: 410mm
- Maximum arm extension from upright: 394mm
- Maximum clamp point thickness: 65mm



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 5+	Qty 10+
CW-2874	\$59.95	\$53.95	\$47.95

### DUAL PC MONITOR DESK BRACKET

VESA-compliant. Its unique, flexible design offers an exceptional range of motion and allows monitors to be placed back-to-back for use by more than one person. Other features include display adjustment with tilt, swivel and rotation capabilities and fits most 13" to 27" flat-screen displays. Its durable, all-metal frame with scratch-resistant, powder-coat finish withstands the stress of repeated use and blends easily into any decor. It comes with all necessary mounting hardware, and each mount supports weights of up to 8kg.



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 5+	Qty 10+
CW-2875	\$79.95	\$71.95	\$63.95

## PC SECURITY

### COMBINATION NOTEBOOK CABLE LOCK

As easy as typing in four digits to unlock your phone, this laptop security cable has a four digit combination that you can customise for security. It's 1.8m long and has a swivel on the end so moving it around your desk area will not be a problem.

- 4 digit combination & steel lock mechanism



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 4+	Qty 10+
XC-4639	\$16.95	\$14.95	\$13.35



## KEYBOARDS

### BLACK QWERTY USB KEYBOARD

This incredibly flat and light QWERTY keyboard is plug & play and simple to use. Change the inclination with the two stands that are discreetly tucked away on the sides.

- Supports API or APM II
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 452(L) x 161(W) x 20(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
XC-5146	\$10.95	\$9.85	\$8.75

### ROLL UP QWERTY KEYBOARD

A flexible and virtually indestructible QWERTY keyboard. The moisture-resistant silicone allows you to spill as much as you like with no effect on function. Dropping donut crumbs into more traditional keyboards requires tediously removing keys to clean out the mess. The bendable silicon allows for easy transportation and the material creates a soundless typing experience. Perfect for industrial or wet areas such as factories, labs, workshops, restaurants, shops and food preparation areas. As it rolls up into a compact bundle, it's also ideal for travellers.

- USB interface
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Can be rolled up to 135(H) x 80(Dia)mm
- Laid out dimensions: 405(W) x 135(D) x 10(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
XC-5172	\$22.95	\$20.45	\$17.95

## MICE & ACCESSORIES

### BUDGET 3 BUTTON OPTICAL MOUSE

A low profile, ergonomic 3-button optical mouse. Simple and easy to use. Plug and play.

- Resolution: 1000 DPI
- Zoom-in, zoom-out; page up, page down
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



CAT.	Qty 1+	Qty 4+	Qty 10+
XM-5243	\$9.95	\$8.75	\$7.75

### USB 5 BUTTON OPTICAL MOUSE

All the normal mouse functions - left and right click, scrolling, plus forward, back and quick-launch button as well as a scroll wheel. Ergonomically shaped for fatigue-free use.

- Resolution: 800/1200/1600
- Plug and play - no drivers required
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



CAT.	Qty 1+	Qty 4+	Qty 10+
XM-5241	\$17.95	\$15.95	\$14.35

### 5 BUTTON WIRELESS OPTICAL MOUSE

A compact, 5 button wireless optical mouse with nano dongle that tucks away neatly into the base. Great for travellers.

- 2.4GHz Wireless
- 1000/1500/2000 DPI conversion with indicator
- 4th and 5th buttons can be custom assigned functions after driver installation
- Multi-stage power saving modes
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



CAT.	Qty 1+	Qty 4+	Qty 10+
XM-5248	\$24.95	\$22.35	\$19.70

### COMPUTER MOUSE PAD

Great tracking for all mice types. Made from blend of Polyester and Spandex and only 2mm thick.

- Non-skid surface holds the mat in place
- Black in colour
- Dimensions: 260(W) x 200(H) x 2(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
XM-5099	\$4.95	\$4.45	\$3.95

## KEYBOARD & MOUSE COMBOS

### MINI WIRELESS KEYBOARD MOUSE COMBO

Enjoy true 2.4Ghz wireless freedom with this keyboard that features a handheld design for convenient use without a desk surface and a integrated touchpad that eliminates the need for a mouse. Perfect for use as an advanced "remote control" for your Internet enabled TV or home media PC. Navigating through web pages on the big screen from the couch will need more than your standard up/down/left/right remote. This handy keyboard features the full QWERTY key layout and a brilliant little touchpad mouse. It also has those handy media shortcut keys, play, pause, fast forward/rewind and volume controls etc. Operates on the popular 2.4GHz band for easy wireless access. Includes nano sized USB dongle.

- Low battery power LED indicator
- USB plug and play, no drivers required



SPECIFICATIONS	XC-4951
Operation range:	10m
Power:	2 x AAA batteries (included)
Compatibility:	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.6+, Linux & Android
Dimensions:	146(L) x 95(W) x 17(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Mini Wireless Keyboard & Mouse	XC-4951	\$29.95	\$26.95	\$23.95

### 2.4GHZ WIRELESS KEYBOARD & MOUSE

An all-in-one wireless keyboard and mouse solution perfectly suited to home or office PC applications. Features Qwerty keyboard and an ergonomically designed precision mouse with scroll wheel. A nano sized USB receiver is tucked into the base of the mouse for connection to your PC.

- Operating range: Up to 10m
- Operates on the 2.4GHz spectrum
- Mouse: 2 x AAA batteries (included)
- Keyboard: 1 x AAA battery (included)
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Keyboard dimensions: 435(L) x 125(W) x 18(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
Wireless Keyboard & Mouse	XC-5174	\$34.95	\$31.45	\$27.95

### USB GAMING KEYBOARD AND MOUSE

This mighty keyboard and mouse combo will certainly impress your friends at your next LAN party. The keyboard has extremely tactile and quiet keys, a switchable blue backlight, sturdy construction, plus programmable multimedia and Internet keys. The mouse is very sturdy with resolution up to 3200dpi for flexibility.

- Blue LED backlight on keyboard, 4 colours on mouse
- Mouse DPI can be set to 1200, 1600, 2000, and 3200
- Anti-skid scroll wheel
- Multimedia and internet hotkeys



SPECIFICATIONS	XC-5132
Connection	USB
Dimensions	Keyboard: 488(W) x 209(D) x 34(H)mm Mouse: 124(D) x 71(W) x 45(H)mm
Cable Length	1.5m

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB Gaming Keyboard And Mouse	XC-5132	\$49.95	\$44.95	\$39.95





## GAMING ACCESSORIES

### GAMING HEADPHONES WITH ADJUSTABLE MICROPHONE

A gaming headset designed for hardcore gamers who enjoy many hours of gameplay and demand superior gaming audio, clarity, and bass. They are comfortable and adjust to different head sizes, look great and feature a microphone that swivels 120° degrees. The microphone tucks away out of view when not required. The braided fabric audio lead is over 2m long and incorporates a volume control and mic mute switch. Includes a 2 x 3.5mm to 4 pole adaptor.

- Plug type: 2 x 3.5mm stereo
- Cable length: 2m



HEADPHONES	AA-2126
Driver Diameter	40mm
Frequency Range	20Hz - 20kHz
Sensitivity	114dB $\pm$ 3dB
Impedance	320hm
Max. Input Power	30mW
MICROPHONE	
Mic. Diameter	6.0 x 5.0mm
Sensitivity	-38dB $\pm$ 3dB
Directivity	Omnidirectional



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AA-2126	\$49.95	\$44.90	\$39.90

### GAMING NON-SLIP MAT FOR KEYBOARD AND MOUSE

This ultra durable gaming pad will keep your keyboard where you want it, and your mouse responsive. Thick 3mm material ensures it smooths out any imperfections in your desktop, for reliable mouse response. Quality that will last well beyond the final level.

- Anti-slip rubber base
- Smooth cloth surface
- Stitched edge
- Dimensions: 795(W) x 345(L) x 3(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10
	XM-5096	\$19.95	\$17.95	\$15.95

## MULTIMEDIA SPEAKERS

### USB POWERED PC SPEAKERS

Portable USB-powered speakers for use with laptops, desktop PCs or mobile music players. Contemporary, space saving design with plug and play functionality. Separate volume control, power switch and headphone output, and as they're powered via your computer's USB, there's no need to use a plug pack or batteries.

SPECIFICATIONS	XC-5191
Power Output	1.8WRMS
Input Jack	3.5mm
Input Power	USB
Frequency Response	160Hz - 20kHz
Dimensions	154(H) x 75(W) x 36(D)mm



PLUG	WATTAGE	CAT.	Qty 1+	Qty 4+	Qty 10+
USB	1.8WRMS	XC-5191	\$14.95	\$13.35	\$11.70

## WEB CAMERAS

### HIGH DEFINITION 1080P WEB CAMERA

It's capable of taking 12MP still images (Software enhanced). The foldable stand allows it to comfortably sit on top of a CRT, laptop or LCD monitor.

- Full HD1080p Video Recording (Max Resolution 1920 x 1080)
- High quality 5MP lens
- Multi-functional clip with 360° rotation
- Built-in high sensitive stereo microphone
- Snap shot button for image capture
- Up to 12 Mega Pixel image capture (Software enhanced)
- Built-in microphones with automatic noise reduction
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.4+, Linux



	CAT.	Qty 1+	Qty 4+	Qty 10+
1080p	QC-3205	\$44.95	\$40.45	\$35.95

## PC AUDIO

### PC DESKTOP MICROPHONE - OMNIDIRECTIONAL

A high quality gooseneck microphone that is ideal for Skype chat, podcasting, video conferencing and music/voice recordings. It has a solid base to provide stability and a flexible neck angle to position it to the optimum position.

SPECIFICATIONS	AM-4089
Mic Plug	3.5mm
Cable Length	2m
Impedance	<2.2k ohm
Sensitivity	-58dB $\pm$ 3dB
Frequency	100Hz-16kHz
Directivity	Omnidirectional
Dimensions	355(L) x 9(Dia)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
3.5mm plug 2m	AM-4089	\$15.95	\$14.35	\$12.75

### 7.1/5.1 USB EXTERNAL SOUND CARD

To keep costs down, laptops, Ultrabooks and desktop PCs often suffer from poor onboard audio or only include one microphone/audio jack. Achieving good sound is too often neglected when compared to computing power or video performance. Dedicated sound cards offer a way to give a crisp, bassy, more complete sound that will make games and movies far more immersive. This device supports analogue and digital audio for 2.1 to 7.1 speakers. There is digital input/output (TOSLINK) plus analogue input (3.5mm) for connecting tablets, smartphones or MP3 players up. There's also a headphone output for the gamer or stealth movie watcher. Simply connect the sound card to your USB port, connect to your speakers and enjoy the pleasures of superior sound.



SPECIFICATIONS	XC-4905
Inputs	2 x Microphone (3.5mm) 1 x Digital (Optical TOSLINK) 1 x Line In (3.5mm)
Outputs	1 x Headphone (3.5mm) 1 x Digital (Optical TOSLINK) 1 x Front Left/Right Speaker (3.5mm) 1 x Rear Left/Right Speaker (3.5mm) 1 x Surround Left/Right Speaker (3.5mm) 1 x Centre/Subwoofer (3.5mm) 1 x USB 2.0 B (PC Connection)
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, Mac OS X® 10.0+
Dimensions	120(L) x 60(W) x 22(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4905	\$59.95	\$53.95	\$47.95

### USB MIDI INTERFACE 2M CABLE

Connect any MIDI device to your computer: keyboards, controllers, instruments, sound cards, samplers, drum machines etc. Plug and play, no software or drivers required. MIDI in and MIDI out connectors with LED indication.

- Compatible with Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4934	\$29.95	\$26.90	\$23.70

## SCREEN CLEANER KIT

### SCREEN CLEANER KIT FOR SMALL DEVICES

This handy screen cleaner is suitable for all small screens including iPhone®, mobile phones and cameras. The unique cleaning solution removes fingerprints, dust and stains without scratching the screen. Supplied with a washable microfibre finger cloth and a 12ml cleaning solution bottle.

- Drip-free cleaning solution
- Includes 12ml cleaning solution bottle
- Dimensions: 90(H) x 45(W) x 22(D)mm

iPhone® not included.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AR-1415	\$5.95	\$5.35	\$4.75

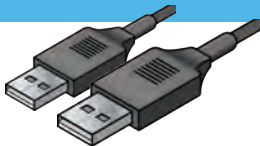
## USB Leads and Adaptors

We pride ourselves on a huge range of USB adaptors and leads, for the latest USB Type-C, conventional USB, and just about everything to adapt between the different standards. The plug drawings are not shown to scale, but shown to assist with plug identification to aid in selection. If you are unable to identify your plug or lead, you can bring it in to your local store for assistance.

### USB A

#### USB A

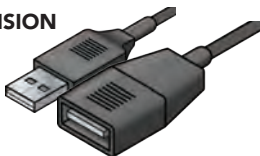
USB 2.0 / 3.0  
Plug to plug.



USB 2.0	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7707	\$5.95	\$5.25	\$4.75
1.8m	WC-7704	\$9.95	\$8.75	\$7.75
USB 3.0	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7770	\$12.95	\$11.45	\$9.95

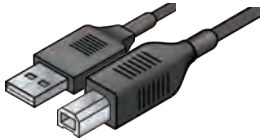
#### USB A - EXTENSION

USB 2.0



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7708	\$5.95	\$5.25	\$4.75
1.8m	WC-7702	\$9.95	\$8.75	\$7.75
3.0m	WC-7703	\$11.95	\$10.70	\$9.50

#### USB B

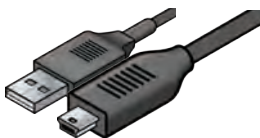


USB 2.0	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7705	\$5.95	\$5.25	\$4.75
1.8m	WC-7700	\$9.95	\$8.75	\$7.75
3.0m	WC-7701	\$11.95	\$10.70	\$9.50
5.0m	WC-7706	\$14.95	\$13.35	\$11.70
USB 3.0	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7772	\$12.95	\$11.45	\$9.95

#### USB MINI B

USB 2.0

Suits Sony PSP®.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7709	\$5.95	\$5.25	\$4.75
1.8m	WC-7710	\$9.95	\$8.75	\$7.75

#### USB MINI B - PREMIUM

High quality. Gold plated connectors.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7792	\$14.95	\$13.35	\$11.70

#### MICRO B

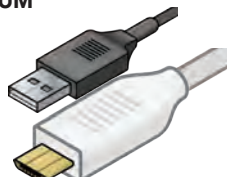
Great value.



	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7757	\$4.95	\$4.45	\$3.95
0.5m	WC-7723	\$5.95	\$5.25	\$4.75
1.8m	WC-7724	\$9.95	\$8.75	\$7.75

#### MICRO B - PREMIUM

High quality. Gold plated connectors.



### CONCORD

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7796	\$14.95	\$13.35	\$11.70

#### USB MICRO B SUPERSPEED

USB 3.0



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7774	\$12.95	\$11.45	\$9.95

#### LIGHTNING®

Charge or sync your Lightning® socket equipped iPhone® 5, iPad®, or other Apple® devices. Available in MFi and non-MFi options. MFi approval means you will get maximum compatibility and reliability as it is officially approved by Apple®.

Made for

iPod iPhone iPad

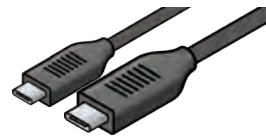
NOT MFI	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7759	\$14.95	\$13.45	\$11.95
1m	WC-7728	\$14.95	\$13.35	\$11.70
MFI	CAT.	Qty 1+	Qty 3+	Qty 6+
1m	WC-7731	\$19.95	\$17.70	\$15.70
3m	WC-7733	\$34.95	\$31.45	\$27.95

### USB TYPE-C

#### TYPE-C

USB 2.0

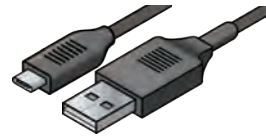
Plug to plug.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7920	\$24.95	\$22.45	\$19.95

#### USB A

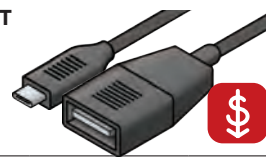
USB 2.0 / 3.0



USB 2.0	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7758	\$12.95	\$11.45	\$9.95
1.8m	WC-7900	\$14.95	\$13.45	\$11.95
USB 3.0	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7910	\$19.95	\$17.95	\$15.95

#### USB A SOCKET

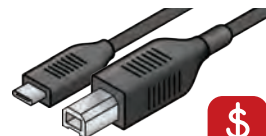
USB 2.0.



	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7909	\$11.95	\$10.45	\$9.45

#### USB B

USB 2.0.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7906	\$14.95	\$13.45	\$11.95

#### MINI B

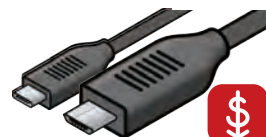
USB 2.0.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7904	\$14.95	\$13.45	\$11.95

#### MICRO B

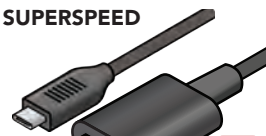
USB 3.0



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7902	\$14.95	\$13.45	\$11.95

#### USB MICRO B SUPERSPEED

USB 3.0



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7912	\$19.95	\$17.95	\$15.95

**1 Year Warranty:**

On all USB leads for peace of mind.

### Smart Hardware Competition:

- BENJAMIN VINES,  
SHOPS AT JAYCAR BUNBURY

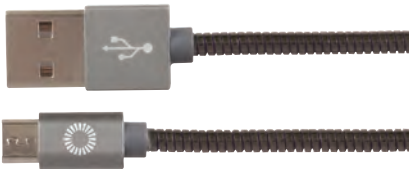
"Removing rust by electrolysis"



## ✓ ARMoured LEADS

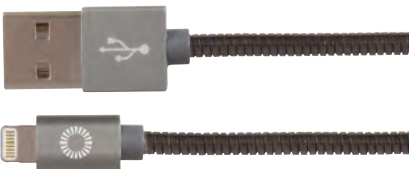
Stainless Steel armour-wrapped for long-lasting protection against damage. All 1m long.

### USB A TO MICRO B - ARMoured USB 2.0



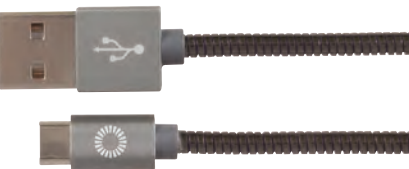
	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7753	\$19.95	\$17.95	\$15.95

### USB A TO LIGHTNING® - ARMoured USB 2.0



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7754	\$29.95	\$26.95	\$23.95

### USB TYPE-C TO USB A - ARMoured USB 2.0



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7755	\$29.95	\$26.95	\$23.95

## ✓ LEGACY DEVICE CHARGING

### USB CHARGE/SYNC LEAD FOR iPOD® / iPHONE® / iPAD®

Suitable for Apple® iPhone®, iPod® and iPad® with 30-pin Apple® connector.



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
150mm	WC-7689	\$4.95	\$4.45	\$3.90
1m	WC-7693	\$7.95	\$6.95	\$6.25
3m	WC-7688	\$9.95	\$8.75	\$7.75

### SYNC/CHARGE LEAD FOR GALAXY TAB®

Sync/charge lead to suit Samsung Galaxy Tab.

• Length: 1m



	CAT.	Qty 1+	Qty 3+	Qty 6+
	WC-7680	\$9.95	\$8.75	\$7.75

**1 Year Warranty:**  
On all USB leads for peace of mind.

## ✓ EXTRA LONG USB LEADS

### ACTIVE USB 2.0 EXTENSION LEADS

Extend your USB devices. A built-in extender allows you to put data over longer distances. All use USB timing and electrical specifications that eliminate signal errors you may get in passive cables. USB 2.0 or 3.0, male to female and cables can be joined up to 25 metres.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
5m	XC-4839	\$24.95	\$22.35	\$19.70
10m	XC-4120	\$39.95	\$35.90	\$31.90
20m	XC-4124	\$49.95	\$44.90	\$39.90

### POWERED USB 3.0 EXTENSION LEADS

Suitable for high speed USB 3.0 applications.

- USB A plug to socket
- XC-4128 has option for external 5V power to support high consumption device



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
5m	XC-4126	\$34.95	\$31.45	\$27.90
10m	XC-4128	\$69.95	\$62.95	\$55.95

## ✓ EXTRA LONG USB LEADS

### USB RJ45 EXTENSION ADAPTOR

Connect any USB device to your computer from up to 50 metres away via a standard Cat 5 network cable. Now you can have your printer, webcam, keyboard, mouse or any other USB device exactly where you want it without having to move your computer around.

- PC and Mac® compatible
- Requires standard Cat5e cables
- Supports USB 1.1
- Transmitter & Receiver included



	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4884	\$29.95	\$26.90	\$23.70

## ✓ ON-THE-GO (OTG)

### USB 2.0 OTG FEMALE A PLUG TO RIGHT-ANGLE MICRO MALE B PLUG

Connect a USB peripheral to a USB OTG compliant mobile/portable electronic device, such as your Smartphone.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7725	\$4.95	\$4.45	\$3.90

## ✓ USB MULTI ADAPTORS

### 3 IN 1 MICRO B TYPE-C LIGHTNING MFI

Perfect for universal charging of smart devices, when you have all sorts of different makes and models. Includes a 1m universal charge and sync cable with 3 different plugs to interchange as needed. Charges popular smartphones, mobile phones and iPhone®/iPod® as well as some PDAs and MP3 players.



Made for  
iPod iPhone iPad

	CAT.	Qty 1+	Qty 4+	Qty 10
	WC-7762	\$29.95	\$26.95	\$23.95

### UNIVERSAL USB PHONE CABLE WITH 8 PLUGS

Perfect for universal charging of smart devices, when you have all sorts of different makes and models. Includes a 1m universal cable with 8 different plugs to interchange as needed. Charges popular Smartphones, mobile phones and iPhone®/iPod®, as well as some PDAs and MP3 players.



Product may vary to one shown



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1m	WC-7751	\$14.95	\$13.45	\$11.95



### Smart Hardware Competition:

- KATHLEEN BLACK, SHOPS AT  
JAYCAR EAST KEW

"It's a 'Teabag jiggle'. It automatically jiggles tea bags, and, most importantly, always leaves the tea bag at the top out of the water so that the tea doesn't stew."

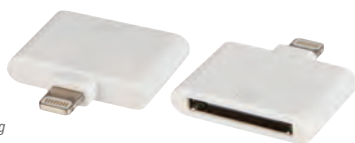


## ADAPTORS

### LIGHTNING® PLUG TO 30 PIN APPLE® SOCKET ADAPTOR

A compact adaptor suitable for connecting an iPod®, iPhone® or iPad® using the Lightning™ connector to peripherals that use the older 30-pin connector, such as chargers and docks.

*Note: This Adaptor is intended for charging and syncing only.*



	CAT.	Qty 1+	Qty 3+	Qty 6+
Adaptor	WC-7726	\$9.95	\$8.95	\$7.95

### USB 2.0 TYPE-C TO MICRO B SOCKET ADAPTOR

A lot of recent computers only have USB Type-C sockets. Use this adaptor for when you require a USB Micro B socket.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Type-C to USB 2.0	PA-0937	\$7.95	\$7.15	\$6.35

### USB 3.0 A PLUG TO TYPE-C SOCKET ADAPTOR

Converts a USB 3.0 Type-C socket to Type-A plug.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Type-C to USB 3.0	PA-0929	\$11.95	\$10.75	\$9.55

### USB 3.0 TYPE-C TO SOCKET ADAPTOR

Converts a standard USB 3.0 type A plug to Type-C. Please Note: This unit only works for PC's or laptops, it is not suitable to use as USB On-The-Go (OTG) for smartphones and tablets.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Type-C to USB 3.0	PA-0935	\$11.95	\$10.75	\$9.55

### 3.5MM AUDIO CONVERTERS

Connects to a spare USB port and provides a microphone input, and stereo headphone output - ideal for use with headsets. You don't have to use both interfaces, you can simply use it as a microphone input, or to connect headphones to a computer without a soundcard. Plug and play, compatible with PC and Mac® systems.



SPECIFICATIONS	BOTH MODELS
Digital Interface	USB2.0
Analogue Interface	3.5mm Stereo Audio Output (Headphones), 3.5mm Audio Input (Mic)
Dimensions	27(W) x 45(D) x 12(H)mm (Excluding Cable and USB Plug)
Cable Length	170mm

LENGTH		CAT.	Qty 1+	Qty 4+	Qty 10+
170mm	Type-A	XC-4953	\$24.95	\$22.45	\$19.95
170mm	Type-C	XC-4955	\$29.95	\$26.95	\$23.95

### 3.5MM 4 POLE ADAPTOR LEADS

Interchange between 3.5mm stereo and 4-pole plugs and sockets. Great for laptops, smartphones, and computers. 250mm long.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
Socket to 2 x 3.5mm Plugs	WA-7022	\$6.95	\$6.25	\$5.50
Plug to 2 x 3.5mm Sockets	WA-7020	\$6.95	\$6.25	\$5.50

### USB TYPE-C TO 3.5MM AUDIO ADAPTOR

Quick and easy headphone connection for your USB Type-C enabled device. Plug and play connection with most systems. Braided cable and gold-plated 3.5mm socket for long-lasting performance.

- Braided cable
- Gold plated 3.5mm socket
- Plug n play
- Cable Length: 80mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	WC-7930	\$19.95	\$17.95	\$15.95

## USB HUBS

A range of USB 2.0 hubs for any budget or application. Powered by the USB port and all include a lead.

### USB 2.0 4 PORT STAR HUB

Star shaped 4 port hub. Compact design to reduce desk clutter with power indication LED.

- Compatible with Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 50(W) x 50(L) x 15(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	XC-4302	\$12.95	\$11.35	\$10.35

### USB 2.0 4 PORT SLIMLINE HUB

Extend the connectivity of your devices with this slimline hub. It's compliant with USB 2.0 specifications and will connect up to 4 x USB 2.0 devices. Additional power can be provided by using a Micro B USB cable to an additional socket on your computer or a USB power supply (not included).

- Interface: USB 2.0 Type-A
- Transfer Speed: 30Mbps
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux
- Dimensions: 106(L) x 32(W) x 10(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	XC-4958	\$19.95	\$17.95	\$15.95

### USB 2.0 10 PORT SLIMLINE HUB

This is a 10 port USB hub and charger in one, so you can transfer files, and charge devices at up to 1.5A from each port. This unit incorporates BC 1.2 technology which is able to detect your devices fastest charging speed for smartphones and tablets. It has a combined maximum power of 4A, but realistically not everything will be charging at the same time. Includes a 5VDC, 4A power supply.



SPECIFICATIONS	XC-4959
Interface	USB 2.0 Type-A
Transfer Speed	Up to 30Mbps
Fast Charging	BC 1.2
Power	5VDC, 4A
Cable Length	1.2m
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
Dimensions	157(L) x 30(W) x 21(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	XC-4959	\$59.95	\$53.95	\$47.95

### USB 3.0 4 PORT MINI HUBS

These portable and easy to use 4 Port USB 3.0 hubs offers 10 times faster transfer speed than USB 2.0 devices. Ideal for home, office and travel.



SPECIFICATIONS	BOTH MODELS
Interface	USB 3.0
Transfer Rate	Up to 80Mbps
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.0+, Linux
Dimensions	61(L) x 61(W) x 10(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4952	\$24.95	\$22.45	\$19.95
USB 3.0 Compact	XC-4979	\$29.95	\$26.95	\$23.95

### USB 3.0 TYPE-C 4 PORT HUB

Latest USB 3.0 Type-C connector for the new generation MacBook® and PCs. This 4 port hub expands your computer's connectivity and makes the most of the lightning fast speed. All 4 ports support USB 3.0 Super Speed and at the same time are downward compatible with USB 2.0. Also includes a USB 2.0 Micro B socket for additional power if required.



SPECIFICATIONS	XC-4306
Interface	USB 3.0 Type-C
Transfer Rate	up to 80Mbps
Dimensions	68(H) x 64(W) x 13(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB Type-C	XC-4306	\$39.95	\$35.90	\$31.90

## USB HUBS (CONTINUED)

### USB 3.0 7 PORT SLIMLINE HUB

Provides full USB 3.0 functionality to 7 ports, providing you with a convenient way to externally connect all sorts of USB 3.0 devices, such as smartphones, cameras, printers, and more. It's slimline to conveniently fit into luggage or a laptop bag, and is backward compatible with older USB devices too. A mains adaptor provides up to 4A of power, to keep those power-hungry devices running without overloading your computer, up to 1.5A per port (4A total max). Plug and play.

- USB 3.0 with super speed transfer up to 5Gbps, and backward compatible with USB2.0
- Connect up to 7 USB devices
- Plug and play



SPECIFICATIONS	XC-4957
Power	5V @ 4A
Weight	95g
Cable Length	400mm
Dimensions	157(W) x 21(H) x 30(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4957	\$69.95	\$62.95	\$55.95

### USB 3.0 TYPE-C HUB AND CARD READER WITH POWER DELIVERY

Expand the connectivity of your computer with this card reader and hub combo with USB Type-C plug and power delivery socket. The unique power delivery system enables an existing Type-C power supply to charge your laptop while the hub is connected. It recognises and adjusts the device's specific voltage requirement including 5,12,14.5 and 20V to support all laptops. The USB Type-C adaptor provides USB 3.0 speeds and features 2 x USB 3.0 ports, SDXC and microSD card reader slots and a USB Type-C power delivery socket on the back. This is ideal for use with the MacBook® to maximise the connectivity of its singular USB Type-C input.



SPECIFICATIONS	XC-4308
Interface	USB 3.0 Type-C
Inputs	2 x USB 3.0 Type-A Ports, 1 x SDXC Slot, 1 x MicroSD Slot, 1 x USB 3.0 Type-C Power Delivery/Data Port
USB Transfer Rate	up to 80Mbps
Supported Card Size	up to 512GB SDXC, 256GB MicroSD
Power Delivery Profile	4 (20V, 3A Max)
Power Delivery Support	2.0 (V1.1)
Dimensions	81(L) x 52(W) x 15(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB Type-C	XC-4308	\$79.95	\$71.95	\$63.95

## MEMORY CARD READERS

### USB 3.0 MULTI MEMORY CARD READERS

Latest USB 3.0 standard for ultra-fast transfer of data. USB Type-C and Type-A models available connector for the new generation MacBook® and PCs. This multi-card reader expands your computer's connectivity and makes the most of the lightning fast speed. Supports SDXC, SDHC, microSD and CompactFlash card slots. See website for a full list of supported cards.



SPECIFICATIONS	BOTH MODELS
Interface	USB 3.0
Transfer Rate	Up to 80Mbps
Supported Card Size	Up to 512GB SDXC, 256GB microSD, 256GB CompactFlash
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.4+, Linux
Dimensions	69(L) x 63(W) x 14(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB Type-C	XC-4751	\$39.95	\$35.90	\$31.90
USB Type-A <b>NEW</b>	XC-4310	\$34.95	\$30.95	\$27.95

### COMPACT USB 2.0 MULTI-CARD READER

Designed for convenience this USB multi-card reader is small enough to attach to your keyring. Despite its size it accepts a wide variety of popular formats. To use simply fold out the USB adaptor, fold back for easy storage or travel.

- Fold away USB adaptor
- Supported card formats: MS/MS Pro Duo/ M2/T-Flash/MicroSD/SDHC/SD/MMC/RS MMC/Mini SD
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 40(L) x 34(W) x 15(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	XC-4749	\$12.95	\$11.35	\$10.35

### ALL-IN-1 USB 2.0 CARD READER

This USB card reader reads most memory cards in use today, including:

SD, MicroSD, SD Ultra II, SD Extreme III, MMC, MMC II, MMC 4.0, RS-MMC, HS RMMC, MMC Micro, M2, MS, MS Pro, MS Pro Duo, MS Extreme Pro, MS Extreme III Pro, MS Ultra II Pro, HS MS-MG Pro HS MS-MG Pro Duo, MS ROM, MS Select, XD, XD(M), XD(H), CF I & II, CF Ultra II, CF Extreme III, CF Extreme, HS CF & Micro-drive. USB cable included.

- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 68(L) x 40(W) x 13(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	XC-4926	\$19.95	\$17.70	\$15.70

### COMPACT USB3.0 SD/MICROSD CARD READER

Compact yet ultra-fast. It's not much bigger than a thumb-drive, and there's no messy cable. Just plug it into your USB port, slot in your fullsize or microSD card, and you're set. No drivers required, and it will read and write at ultra-fast speeds thanks to the USB3.0 data handling. Includes a cap for the USB plug to avoid damage when not in use.



SPECIFICATIONS	XC-4782
USB Standard	3.0
Compatibility	SD / SDXC / microSD
Dimensions	21(W) x 70(D) x 10(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4782	\$16.95	\$14.95	\$13.45

### USB 3.0 MEMORY CARD READER

This card reader accommodates all the mainstream memory cards including the SDXC and CF600x standards.

- Includes 1 x USB 3.0 cable
- Hot swappable
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, Mac OS® X 10.0+, Linux
- Dimensions: 86(L) x 58(W) x 21(D)mm

**CF Slot:** Compact Flash Type I/II, CF Elite Pro, CF PRO I, CF PRO II, CFTurbo, CF Ultima I, CF Ultima II, Extreme CF, Extreme III CF, HS CF, Ultra II CF

**MS Slot:** MS, MS DUO, MS PRO, MS PRO DUO, MS MagicGate, MS MagicGate PRO, MS MagicGate DUO, MS MagicGate PRO DUO, Extreme MS PRO, Extreme III MS PRO, Ultra II MS PRO, HS MS MagicGate PRO HS MS MagicGate PRO DUO, MS ROM, MS Select

**SD Slot:** SecureDigital (SD), Elite Pro SD, Extreme III SD, Gaming Edition SD, Platinum II SD, SD Pro, SDHC, SDXC, SD-Max, SD-Pleomax, SD-Pro C, Super SD, Turbo SD, Ultima I SD, Ultima II SD, Ultimate SD, Ultra High Speed SD, Ultra II SD, Ultra II SD Plus, Ultra SD, Ultra-X SD, DV-RS MMC, High Speed MMC/ RS-MMC, MCCmobile, MMC Pro, MMCplus, MMCplus Turbo, RS-MMC

**Micro SD / M2 Slot:** MicroSD (TransFlash), microSDHC / M2



	CAT.	Qty 1+	Qty 4+
USB 3.0	XC-4757	\$29.95	\$26.95

## DVDs / Blu-Ray / CDs:



### DVD 8.5GB DUAL LAYER 8X

Verbatim DataLifePlus (AZO)

XC-4744

### DVD-RW 4.7GB SINGLE 2X

DataLifePlus (SERL) DVD-RW4.7GB

XC-4732

### DVD+RW 4.7GB SINGLE 4X

Verbatim DataLifePlus (SERL) DVD+RW

XC-4734

### DVD+R 4.7GB 16X

Verbatim DataLifePlus (AZO) DVD+R

XC-4733

### DATALIFEPLUS (AZO) DVD-R 4.7GB 16X

XC-4731

### BLU-RAY DISCS 25GB SINGLE

BD-R: XC-4747

BD-RE: XC-4748

### DVD+R DL 8.5GB 8X SPINDLE 10 PACK

XC-4746

### DVD 4.7GB INKJET PRINTABLE 50 SPINDLE 16X

DVD-R: XC-4738

DVD+R: XC-4745

**Verbatim**



LIFETIME  
GUARANTEE



	CAT.	Qty 1+	Qty 10+
DVD+RDL 8x	XC-4744	\$3.95	\$3.35
DVD-RW 2x	XC-4732	\$2.00	\$1.70
DVD+RW 4x	XC-4734	\$2.00	\$1.70
DVD+R 16x	XC-4733	\$1.10	\$0.90
DVD-R 16x	XC-4731	\$1.10	\$0.90
BD-R 4x	XC-4747	\$4.25	\$3.60
BD-RE 2x	XC-4748	\$7.95	
DVD+R DL 8x 10 Pack	XC-4746	\$32.95	
DVD-R 16x 50 Disks	XC-4738	\$32.95	
DVD+R 16x 50 Disks	XC-4745	\$32.95	

## ✓ CDS

### DATALIFE 80MIN 700MB CD-R JEWEL CASE SINGLES 52X

XC-4707

### DATALIFEPLUS CD-R 80MIN/700MB INKJET PRINTABLE 50 PACK SPINDLE 52X

XC-4718

**Verbatim**



LIFETIME  
GUARANTEE

XC-4718

	CAT.	Qty 1+	Qty 10+
CD-R 52x	XC-4707	\$1.45	\$1.20
CD-R 52x 50 Disks	XC-4718	\$26.95	

## ✓ DVD, BLU-RAY, CD CASES

### SLIMLINE CD/DVD MAILING SLEEVE

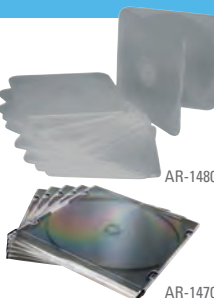
Mail your precious CDs without fear of damage with this flexible clam style protector. The mailer has a clear window and centering spigot to securely hold the CD in place. Measures 125mm x just 4.5mm thick which won't crack and break like the average jewel case.

AR-1480

### CD/DVD JEWEL CASES FOR SINGLE DISK

Replacements CD case for those that break or wear out.

AR-1470



AR-1480

AR-1470

	CAT.	Qty 1+	Qty 4+	Qty 10+
Mailing Sleeves 10 Pack	AR-1480	\$6.95	\$6.25	\$5.55
Jewel Cases 5 Pack	AR-1470	\$3.95	\$3.55	\$3.15

## ✓ SD CARDS & FLASH DRIVES

### CLASS 10 MICRO SD & SDHC CARDS WITH SD ADAPTOR

- Speed: Class 10 (UHS - 1)
- Includes SD adaptor for normal SD card slots

**Verbatim**

CALL OR SEE WEBSITE  
FOR LATEST PRICING



WARRANTY

	CAT.	Qty 1+
8GB Class 10	XC-4983	\$14.95
16GB Class 10 (UHS-1)	XC-4989	\$19.95
32GB Class 10 (UHS-1)	XC-4992	\$36.95
64GB Class 10 (UHS-1)	XC-4993	\$69.95
128GB Class 10 (UHS-1)	XC-4977	\$149.00

### USB FLASH DRIVES

High speed USB flash drives for conveniently backing up data and quickly transferring files. They feature secure data protection and high reliability.

- Plug and Play
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux



WARRANTY

	CAT.	Qty 1+
8GB USB 2.0	XC-5616	\$11.95
16GB USB 2.0	XC-5617	\$15.95
32GB USB 2.0	XC-5618	\$24.95
64GB USB 2.0	XC-5619	\$44.95
128GB USB 3.0	XC-5625	\$109.00

### USB FLASH DRIVE WITH LIGHTNING® CONNECTOR - MFI

Using this device you can expand the storage of your existing iPod®, iPhone® or iPad®. It allows you to store, organise, and transport any type of files. Simply just drag-and-drop the files right from your computer. It works with all iPod®, iPhone® and iPad® with Lightning® connectors.

- Free app available on iTunes®
- 4GB microSD card included
- Expandable up to a 128GB microSD card (see above)
- Dimensions: 65(L) x 27(W) x 7(D)mm

Made for  
iPod iPhone iPad



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-5628	\$79.95	\$71.95	\$63.95

### 32GB USB TYPE-C DUAL FLASH DRIVE

This dual USB 3.1 Type-C flash drive features one Type-C and one USB-A port for conveniently backing up data and quickly transferring files. It features OTG (On-the-Go) to transfer data from your laptop to your smartphone and vice versa.

- Plug & Play
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- Dimensions: 36(L) x 12(W) x 6(D)mm



	CAT.	Qty 1+
	XC-5626	\$44.95



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out our latest products  
and promotions on  
our website.

Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)



## ✓ LAPTOP COOLING - USB POWERED

### DUAL FAN NOTEBOOK COOLING FAN

Prevents your notebook from overheating on your lap or desk. Features a double 140mm fan and 2 USB ports. It is super silent and you will hardly notice it is there. Incredibly simple to use, just plug into your USB port and away you go!

Also includes a push button on and off switch.

- Unique non slip design
- Rated voltage: 5VDC
- Dimensions: 365(L) x 295(W) x 40(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
Dual Fans	XC-5211	\$17.95	\$16.15	\$14.35

## ✓ HARD DRIVE POWER CABLES

### SERIAL ATA / SATA / ESATA POWER CABLES

A range of SATA and eSATA data/power cables for use with personal computers and external serial ATA devices.

#### 4 PIN POWER SPLITTER CABLE

Standard 4 pin power splitter for PC

- 1 x HDD plug to 2 x HDD sockets
- CAT. PL-0750

#### SERIAL ATA LEAD 7 PIN PLUG

Transfer data between your Serial ATA hard drive and serial ATA interface, at rates up to 150Mbps. Thinner, smaller and more versatile than the Parallel ATA Standard.

Length: 500mm CAT. PL-0978

#### 7 PIN TO 7 PIN SATA

- Colour: Red
- Length: 1 metre
- CAT. PL-0980

#### STRAIGHT TO RIGHT ANGLE SATA

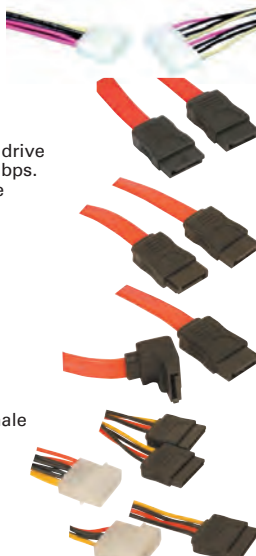
- Colour: Red
- Length: 1 metre
- CAT. PL-0981

#### HDD POWER TO 2 X SATA

- Power two SATA devices from one 4-pin male Molex connector
- Length: 200mm
- CAT. PL-0759

#### HDD POWER TO 1 X SATA

- Power a SATA devices from a 4-pin male Molex connector
- Length: 200mm
- CAT. PL-0758



	CAT.	Qty 1+	Qty 4+	Qty 10+
HDD power to 2 HDD Sockets	PL-0750	\$4.95	\$4.45	\$3.90
SATA to SATA	PL-0978	\$5.95	\$5.25	\$4.75
SATA to SATA	PL-0980	\$7.95	\$6.95	\$6.25
SATA RA to SATA	PL-0981	\$7.95	\$6.95	\$6.25
HDD power to 2 x SATA power	PL-0759	\$7.95	\$6.95	\$6.25
HDD Power to SATA	PL-0758	\$5.95	\$5.25	\$4.75

## ✓ NOTEBOOK HARD DRIVE

### 1TB 2.5" INTERNAL NOTEBOOK HARD DRIVE

A 5200RPM 1TB internal hard drive ideal for laptops, network attached stored devices, game consoles or, media players. It uses 500GB per platter technology and has superior energy efficiency as well as improved acoustic performance at a maximum of 19dB in idle mode and 24dB during seek operations. SATA3



See page 282 for a 2TB Surveillance HDD

SPECIFICATIONS	XC-5680	POWER REQUIREMENTS	
Rotational Speed	5200RPM	Voltage	5V
Transfer Rate To Host	3Gbps	Spin up (start) Power	4.5 watts
Idle Acoustics	19dB	Seek Power	1.85 watts
Seek Acoustics	24dB	Read/Write Power	1.5 watts
Buffer Cache	8MB	Low Power Idle	0.55 watts
Dimensions	69.85(W) x 100(D) x 9.5(H)mm	Standby Power	0.18 watts
Weight	112g	Sleep Power	0.15 watts

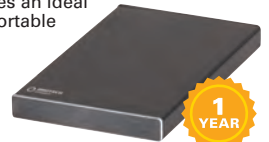
	CAT.	Qty 1+
1TB 2.5" SATA	XC-5680	\$99.95

## ✓ EXTERNAL HDD ENCLOSURES

### 2.5" USB 2.0 EXTERNAL HDD CASE

Instantly add gigabytes of storage to your computer or move large amounts of data from one computer to another. This external hard drive case has a USB 2.0 interface and will accept a standard 2.5" hard drive or SSD. The precision case does away with the awkward ribbon cable and the hard drive easily connects straight onto the PCB mounted connector. When fitted with a hard drive, this unit makes an ideal backup device or could even be used as a portable digital image storage unit.

- Interface: USB 2.0
- HDD Size: up to 2TB Hard Drive
- Transfer Rate: up to 30Mbps
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.4+, Linux
- Dimensions: 126(L) x 76(W) x 12(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	XC-4681	\$19.95	\$17.70	\$15.70

### 2.5" USB 3.0 SATA HDD ENCLOSURE

Protect and transport your valuable data with this hard disk drive(HDD) case. The aluminium case accommodates a standard 2.5" HDD (up to 2TB capacity) and features a micro-B USB 3.0 socket. Experience ultra fast data transfer speeds up to 10 times faster than USB 2.0. The blue LED on the rear of the unit indicates when data is transferring. Super fast and easy installation - simply open the cover, connect the drive and secure the cover back in place. Also includes a lead to connect the drive to your computer via the USB port. A good solution for transferring data between multiple users or devices quickly.

- Interface: USB 3.0
- HDD Size: up to 4TB Hard Drive
- Transfer Rate: up to 80Mbps
- Dimensions: 130(L) x 80(W) x 13(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4686	\$29.95	\$26.95	\$23.95

### 3.5" USB 2.0 EXTERNAL HDD CASE

Accommodates a 3.5" SATA drive up to 6TB in storage capacity. Lightweight aluminium case for increased portability.

- USB 2.0 transfer rate up to 480Mbps
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 183(D) x 117(W) x 31(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB2.0	XC-4669	\$44.95	\$40.45	\$35.90

### 3.5" USB 3.0 SATA HDD ENCLOSURE

Backup your data faster and carry it in style with this slick, black external HDD enclosure. Wait less do more, a USB 3.0 connection transfers data between computer and device up to ten times faster than a USB 2.0 connection. SATA I/II/III support means you can take advantage of the latest HDDs on the market or make use of your old, disused SATA HDDs. Installation is easy, just two screws to remove the back panel and no cables inside. Supplied with a desk stand and power supply.

- Plug 'n' Play
- Hot swappable
- For 3.5" HDDs only (included)
- Supports SATA I/II/III
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4667	\$59.95	\$53.95	\$47.95

## ✓ CLEANING SYSTEMS

### CD/VCD/DVD LENS CLEANER

If you experience jumping, loss of quality or disc failure, then it's probably because your lens are dirty. This easy to use laser lens cleaner not only cleans your CD or DVD equipment, but it also shows a short animation while you wait. Supplied in a jewel case.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AR-1416	\$11.95	\$10.70	\$9.50



## ▼ HDD APAPTORS

### IDE TO SATA HDD UPGRADE PANEL

Clip this onto the end of an old 3.5" IDE hard drive and the drive can then be used in our SATA HDD docks or inside personal computers that lack IDE data and power connectors. A simple method for upgrading IDE drives.

- Dimensions: 105(W) x 25(H) x 62(D)mm
- Compatible with: Maxtor, Samsung, IBM, Hitachi, Seagate Hard drives



	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4970	\$19.95	\$17.70	\$15.70

### SATA TO USB 3.0 ADAPTOR

If you are a downloading enthusiast or an IT professional who has accumulated a number of hard drives over the years and want a simple way to access them temporarily this adaptor is the perfect tool. When used with most enclosures and adaptors, SATA hard drives and solid state drives are limited by the speed of USB 2.0. This new USB 3.0 adaptor will take full advantage of the max speed of SATA (3.0Gbps). Transfer files or clone drives in a fraction of the time. Please note your PC must have a USB 3.0 port to support these speeds. Combine with the XC-4149 3.5" HDD enclosure (sold separately) for an easy, convenient backup solution.

- Fully compliant with USB 3.0 specifications
- Backward compatible with USB 2.0
- Includes USB 3.0 cable and mains adaptor
- Compatibility: Windows 8.1, 8, 7, Vista, XP, 2000, Mac OS® 9.0+, Linux
- Dimensions: 71(L) x 21(W) x 13(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4149	\$39.95	\$35.90	\$31.90

### SATA/IDE TO USB 2.0 HARD DRIVE ADAPTOR

Perfect tool to backup, or transfer large amount of data from one drive to another. Manual hard drive replacement is often labourious and time consuming. This IDE / SATA to USB 2.0 adaptor makes the job whole lot easier and faster with this set of cables designed to connect your SATA or IDE drive external through a USB 2.0 adaptor. It supports 2.5", 3.5" SATA and IDE devices and operates with one IDE and one SATA HDD simultaneously.

Package includes:

- 1 x USB 2.0 to IDE+SATA converter
- 1 x USB 2.0 cable
- 1 x 4Pin Power cable
- 1 x 12V/2A power adaptor
- USB version 2.0 compliant
- SATA II version 1.0a compliant
- USB Mass Storage Class Bulk- Only Transport Specification Compliant
- Dual-Head IDE Connector (40pin and 44pin) plus one SATA II connector
- HDD Support: IDE 2.5" HDD, IDE 3.5" HDD, SATA 2.5" HDD, SATA 3.5" HDD, IDE 5.25" CD/DVD Drives
- Compatibility: Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS® X 10.0+, Linux
- USB cable length: 800mm
- Power Adaptor cable length: 1.5m
- Dimensions: 85(L) x 65(W) x 20(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 2.0	XC-4150	\$44.95	\$40.45	\$35.90

## ▼ DOCKING STATIONS

### USB 3.0 EXTERNAL SATA HDD DOCKING STATION

This device allows you to connect a SATA 3.5" or 2.5" hard drive into a USB port. Great for any computer, but even better for a notebook without any physical means to install one. It creates a fully plug and play compatible method to access any compatible hard drive.



SPECIFICATIONS	XC-4698
Interface	USB 3.0 B
HDD Size	3.5" Up to 10TB, 2.5" Up to 4TB
Transfer Rate	Up to 80Mbps SATA: III (6G)
Power	12V, 2A
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux
Dimensions	138(W) x 78(D) x 65(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4698	\$49.95	\$44.95	\$39.95

### USB 3.0 DUAL 2.5/3.5" SATA HDD DOCKING STATION

Hard drive docking stations provide PC users with the ability to quickly and easily backup valuable data, access old drives, clone, format and debug disk problems. They're a great tool to have around the home or office. This unit provides two SATA docking ports that can accommodate either two 3.5 or 2.5 inch SATA drives or one of each depending on your application. It is USB 3.0 ready so all your disk operations will perform up to ten times faster than on older USB 2.0 docks. High speeds and the convenience of dual docks means less time backing up.



Hard Drive not included

SPECIFICATIONS	XC-4697
Interface	USB 3.0
Transfer Rate	up to 80Mbps
HDD Size	3.5" - Up to 6TB, 2.5" - Up to 2TB
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, Mac OS® 9.0+, Linux
Dimensions	130(W) x 61(H) x 103(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.0	XC-4697	\$79.95	\$71.95	\$63.95

### USB 3.1 TYPE-C SATA HDD DOCKING STATION

Quickly connect an internal SATA drive to any USB Type-C equipped notebook or computer. The drive slot accepts 2.5" and 3.5" drives. The ultra-high speed USB3.1 provides up to 430Mbps transfer rates, so even your high speed drives can be used effectively. Plug and play operation, suitable for use on Windows or Mac™. Backwards compatible (USB 3.0, 2.0, 1.1).



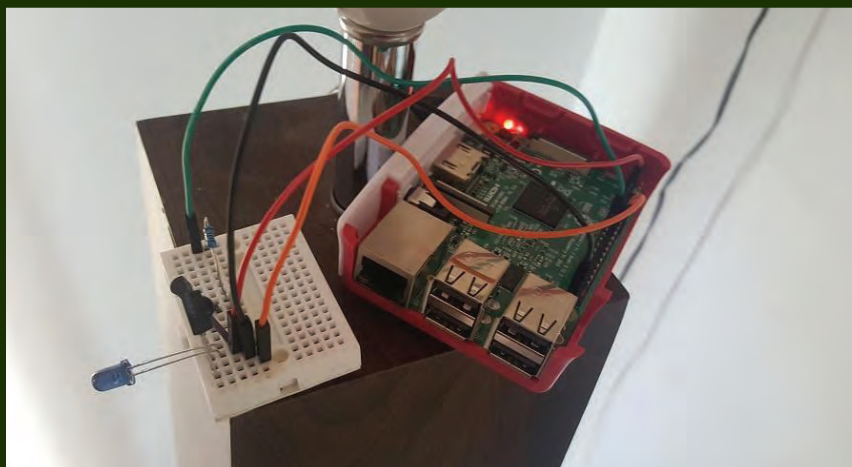
SPECIFICATIONS	XC-4672
Interface	USB 3.1 Type-C
Transfer Rate	Up to 430Mbps
SATA	6G
HDD Size	3.5" - Up to 10TB, 2.5" - Up to 4TB
Dimensions	138(W) x 78(D) x 65(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
USB 3.1 Type-C	XC-4672	\$79.95	\$71.95	\$63.95

## Smart Hardware Competition:

- JASON WOODS, SHOPS AT JAYCAR ALEXANDRIA

"My (enhanced) Raspberry Pi has an IR receiver and an emitter, and can now control the TV + AMP (via IR), and Xbox (via wireless). It's also running a web server so I can control all 3 through my Google Home and custom commands. I'm almost done adding air con support!"



# Uniden® Cordless Phones

Jaycar is proud to announce the inclusion of quality UNIDEN brand Cordless telephone equipment to our 2018 line up, in addition to the PANASONIC range – see pages 328 & 329. Like PANASONIC, the UNIDEN equipment uses DECT Technology (see page 328 for explanation). We have decided to only stock known brands of cordless telephones, as the higher quality is outstanding. The UNIDEN product simply has too many fantastic features to list, but we would be remiss if we did not mention these: A Bluetooth mobile link to connect your cordless to up to 4 (yes, FOUR) mobile phones to your system when the mobile phones are in your home. A 6000 number phonebook (up to 1500 entries per phone) stored in the UNIDEN console and a USB charge port for your mobile. All-in-all, a fantastic addition to the Jaycar 2018 product range.



## UNIDEN CORDLESS TELEPHONE WITH ANSWERING MACHINE

Uniden's DECT 1735 + 1 uses the wireless friendly DECT technology and has an integrated digital answering machine with message counter so you don't miss those important phone calls.

These phones are ideally suited to high density living environments and have an excellent array of features suitable for any home. They have great talking range, unique styling, 3 line backlit display LCD display and are wireless (Wi-Fi) network friendly. The digital duplex speakerphone on the handset makes handsfree communication a breeze.

- Integrated digital answering machine with 14 minutes answering machine recording time
- POP ID - caller name identification
- 70 phonebook memories and 30 caller ID memories
- Up to 10 hours talk time
- Up to 7 days standby time
- Choice of different ring tones
- Maxi sound – extra loud handset volume control
- Wall and desk mountable
- NBN compatible
- Power failure backup
- 2 handsets
- Connections for up to 6 handsets



**Uniden®** WARRANTY

	CAT.	Qty 1+
2 Handset	YT-9036	\$69.95
3 Handset	YT-9038	\$89.95

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required – see website, T&C or Store Manager for details.



## UNIDEN HEARING IMPAIRED CORDLESS TELEPHONE

The Uniden SS E45 is equipped with an integrated digital answering machine with slow playback, ensuring you never miss that important call. The XDECT digital cordless phones offer extended digital coverage by utilising a diversity antenna system for optimal reception and clarity – by mitigating multi-path errors.



It also features a high gain antenna for greater range and to eliminate drop out areas in your home. The SSE45 is equipped with text to speech (TTS) technology.

The extra loud 50dB volume ringer & large screen buttons are ideal for hearing loss/ elderly people, visual problems / low vision, noisy homes or workplaces.

The 3 picture keys with speed dial makes it easy to recognise important contacts.

This system is also suited to quiet “do not disturb” areas (e.g. nursing homes) – use the visual incoming call indicator. The do not disturb function allows you to mute the ringer and is ideal for those times that you don't want to be disturbed.

- Large display screen and buttons
- Integrated digital answering machine with slow playback function
- Extra loud 50dB volume
- 3 picture keys with speed dial
- Slow talk mode for real time voice
- Help call button
- XDECT digital technology phone system
- Hearing aid compatible (T-Coil)
- 7 day battery standby time
- Up to 10 hours talk time
- Multi handset capabilities
- Call block pro
- Flash button (call waiting compatible)
- Keypad lock
- Handsfree speaker
- Battery level indicator
- Do not disturb function
- Handset conferencing
- 50 caller ID - memories and 200 phonebook entries on each handset
- Text to speech (TTS) technology
- Talk time: up to 10 hours
- Standby time: up to 7 days



**Uniden®** WARRANTY

	CAT.	Qty 1+
	YT-9040	\$129.00



# Panasonic Quality Telephones

Panasonic have proven to be a leader in cordless phone and answering machine technology for the domestic and home office marketplace. One of the frequently annoying aspects of cheap cordless phones is the unreliability of the on-hook connection and the battery recharging mechanism. It is quite common with cheap cordless phones to pick up the phone to answer a call only to find that the internal battery is flat because the last user failed to notice that the phone had not started recharging. The outstanding quality of the Panasonic product almost eliminates this vexing issue. Jaycar has selected a core range of Panasonic product for 2018. We are excited by this development and look forward to growing the range in the years to come.

## PANASONIC CORDLESS TELEPHONES WITH ANSWERING MACHINE

A large capacity battery enables a maximum talk time of 16 hours so you can talk for extended durations. The handset can also be left for approximately 8 days without charging. Communications between the cordless handset and base unit are encrypted, and the encryption password is periodically changed to maintain a high level of security. A noise reduction function and large speaker enables recorded messages to be clearly played back. When you want to search for the family and you don't know where they are in the house, you can make an intercom call to all handsets. This lets you find whoever you are looking for without having to run all over the house.

- DECT with security encryption mode
- Answering system sound
- Power back-up operation
- Baby monitor
- Do not disturb mode
- Intercom all



**1 YEAR**

WARRANTY

## Panasonic

SPECIFICATIONS	BOTH
Frequency	1.9GHz
Channels	120
System	DECT 6.0 with security encryption mode
Caller ID Memory	50
LCD	1.8" Backlit
Battery	2 x AAA Ni-MH each (included)
Multiple Handset Capability	Up to 6
Talk Time	Up to 16 hours
Standby Time	Over 8 days
Charge Time	About 7 hours
Base Dimensions	109(W) x 108(H) x 85(D)mm
Handset Dimensions	165(H) x 48(W) x 34(D)mm
Model	YT-9002 - KX-TGD320ALB YT-9004 - KX-TDG322ALB YT-9006 - KX-TDG323ALB

	CAT.	Qty 1+
Single Handset	YT-9002	\$59.95
Twin Handset	YT-9004	\$79.95
Triple Handset	YT-9006	\$99.95

## Tech Talk: What Is DECT?

DECT originally stood for Digital European Cordless Telephone but changed to Digital Enhanced Cordless Telecommunications when the technology included data services and sold in other parts of the world. DECT is a radio technology commonly used for cordless phones in homes and offices. Originally, DECT used the 1.88GHz to 1.90GHz band but now uses the 1.92GHz to 1.93GHz band (DECT 6.0) to avoid interference from other wireless devices and networks.

## PANASONIC SINGLE CORDLESS TELEPHONE

A simple and compact cordless phone with easy to read 1.4" LCD screen. Recharges using the slim base.

- Caller ID
- Long standby time
- HAC (Hearing Aid Compatible) support
- Mute and Keylock



## Panasonic

SPECIFICATIONS	YT-9000
Frequency	1.9GHz
Channels	10
System	DECT
Caller ID Memory	20
LCD	1.4" Amber backlit
Battery	Ni-MH (2xAAA) included
Talk Time	Up to 10 hours
Standby Time	Up to 200 hours
Charge Time	About 7 hours
Base Dimensions	87(W) x 77(H) x 59(D)mm
Handset Dimensions	145(H) x 48(W) x 33(D)mm
Model	KX-TGB110ALB

**1 YEAR**

WARRANTY

CAT.	Qty 1+
YT-9000	\$32.95

## PANASONIC CORDED/CORDLESS TELEPHONE WITH MOBILE LINK

The black-metallic Panasonic system makes communication more versatile for home and home office. Link2Cell® syncs up to two smartphones to make and take cell calls from handsets, and a downloadable Android App alerts you when your cell receives email, updates from social media and more. More features include one-touch cell phone pairing, a tilt-up 3.4" LCD, three speed dials, talking caller ID, baby monitor, 3,000 number phonebook transfer, noise reduction, power backup and a Bluetooth® headset.

- Link to mobile
- DECT with security encryption mode
- Answering system sound
- Baby monitor
- Do not disturb mode
- Intercom all

 **Bluetooth®**  
**Panasonic**



**1 YEAR**

WARRANTY

SPECIFICATIONS	YT-9016
Frequency	1.9GHz
Channels	120
System	DECT 6.0 with security encryption mode
Caller ID Memory	50
LCD	1.8" Backlit Handset / 3.4" (Base)
Battery	2 x AAA Ni-MH each (included)
Multiple Handset Capability	Up to 6
Talk Time	Up to 17 hours
Standby Time	Over 13 days
Charge Time	About 7 hours
Base Dimensions	222(W) x 163(H) x 103(D)mm
Handset Dimensions	168(H) x 48(W) x 30(D)mm
Model	YT-9016 - KX-TGF382AZM YT-9018 - KX-TGFA30AZM

	CAT.	Qty 1+
1 x Corded & 2 x Cordless Phones	YT-9016	\$199.00
Spare Handset	YT-9018	\$84.95

## PANASONIC CORDLESS TELEPHONES WITH BLUETOOTH® MOBILE LINK AND DECT REPEATER

This new system from Panasonic is loaded with features, and is perfect for large homes or small offices. Firstly, it is supplied with a DECT repeater to double the distance from the base station, giving you more flexibility to move around your home or office and even the back yard or garage. Link up to two phones via Bluetooth® and you'll be able to make or receive calls from your mobile using the Panasonic handsets. This saves you having to carry your phone around with you in your pocket while you're home. There is even a USB port on the base station to charge your mobile phone using your appropriate USB charging lead. The advanced answering machine can store up to 18 minutes of recordings. The base station will alert you with a sound when you're at home that a new message is recorded. If you're away, the base station can be programmed to call your preregistered mobile or office phone, and play the message to you. If your caller is calling from a noisy location, you can hear them clearer by simply pressing the noise suppression button. This suppresses the background noise and enhance their voice simultaneously.

- Power failure backup
- Talking caller ID
- Incoming call block
- Night mode
- Intelligent ECO mode
- Answering system (18 mins)
- Intercom



SPECIFICATIONS	BOTH
Frequency	1.9GHz
Channels	120
System	DECT 6.0
Caller ID Memory	50
LCD	1.8" Backlit Handset / 2.5" (Base)
Battery	2 x AAA Ni-MH each (included)
Multiple Handset Capability	Up to 6
Talk Time	Up to 10 hours
Standby Time	Up to 7 days
Charge Time	About 7 hours
Base Dimensions	178(W) x 115(H) x 101(D)mm
Handset Dimensions	168(H) x 39(W) x 31(D)mm
Model	YT-9010 - KX-TG7882AZS, YT-9012 - KX-TG7883AZS



WARRANTY

	CAT.	Qty 1+
Twin Handset	YT-9010	\$159.00
Triple Handset	YT-9012	\$189.00

## BATTERIES

### PANASONIC CORDLESS PHONE BATTERIES

Replacement pair of AAA NiMH batteries for Panasonic cordless phones.

- Capacity: 650mAh
- Supplied fully charged
- Retains up to 80% capacity for 12 months
- Recharge up to 1500 times



	CAT.	Qty 1+	Qty 8+	Qty 15+
AAA 2 Pack	SB-2934	\$9.95	\$8.95	\$7.95

### CORDLESS PHONE BATTERY FOR UNIDEN

2.4V Ni-MH 650mAh CTB96 - 65AAAH2BMJ

Suits Uniden models: 90xx series, XDECT7005WP, 7015, 7055

Also suits telstra 6010, 9200, 9200a, V850a, V850q, V950 a



	CAT.	Qty 1+	Qty 10+	Qty 20+
	SB-1654	\$18.95	\$17.05	\$15.15

## PANASONIC HEARING IMPAIRED CORDLESS TELEPHONE

Panasonic Amplified Cordless Phone with Answering Machine Designed for anyone affected by mild to moderate hearing loss. Features an amplified volume boost to help you hear and be heard, loud and clear. The one-touch slow talk mode allows you to understand quick-talking callers by automatically slowing the speed of the speech while conversing in real time. Block up to 250 unwanted numbers to avoid nuisance callers.

- 40dB (2X) voice volume & speech booster
- Slow Talk
- Large memory dial buttons
- Bright Red Ringer LED
- Large backlit keypad
- Answering machine with battery backup
- Nuisance call block
- Built-in Ni-MH AAA batteries for up to 4 hours backup time



## Panasonic

SPECIFICATIONS	YT-9008
Channels	120
Screen	1.8"
Frequency Range	1.9GHz
System	DECT 6.0
Handset	189(L) x 58(W) x 43(D)mm
Base	178(L) x 141(W) x 72(H)mm
Model Number	KX-TGM420AZB

	CAT.	Qty 1+
	YT-9008	\$89.95



WARRANTY

## TELEPHONE ACCESSORIES

### TELEPHONE EXTENSION RINGER

This can be used to increase the volume of your existing landline phone or to relocate the ringer into a different room or location. It is ideal for industrial environments where background noise can mask the sound of your ringing telephone. Includes mounting screws.

- Wall mountable with On/Off switch
- Multiple tone and pitch selection
- Volume control
- Multiple input types
- 8-12 ohm output for horn speaker
- No battery or external power required
- Dimensions: 155(H) x 90(W) x 30(D)mm



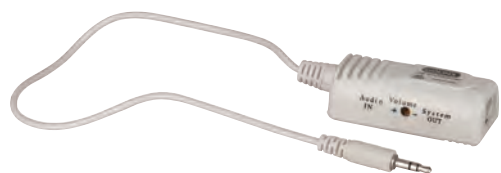
WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 20+
Telephone Extension Ringer	YT-6068	\$29.95	\$26.95	\$23.70

### TELEPHONE ISOLATION ON HOLD KIT

A simple and affordable telephone line isolation unit that can be used as the basis of a telephone music on-hold adaptor. Suitable for even the smallest business, use it to customise the on-hold music that your clients listen to. Accepts input via 3.5mm headphone socket, so it will work fine with any MP3 player. Also includes an RCA adaptor for use with other sound sources.

- Dimensions: 75(H) x 28(W) x 219(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 20+
Telephone Isolation On Hold Kit	YT-6070	\$29.95	\$26.95	\$23.70

**NOT SURE WHAT TO BUY?**

Give a Jaycar Gift Card and let them choose!





## LINE FILTERS & ADAPTORS

### ADSL2+/VDSL2+ FILTERS

If you have an ADSL2+ or VDSL2+ Internet connection, you'll need a compatible filter to keep unwanted noise from the phone or fax line. ADSL filters are not suitable as they don't allow the 2.2MHz bandwidth required for ADSL2+ and you won't get the full speed of your connection. Three different types available, a single in-line filter for use with extra phones or fax line, a filter/splitter for use with the primary line with the modem and phone line connected to it and a central filter for use when an alarm dialler or large number of phone outlets exist. Complies with ACIF S041.

#### ADSL2+/VDSL2+ CENTRAL FILTER:

CAT. YT-6099

(NOT AVAILABLE IN NEW ZEALAND)

#### ADSL2+/VDSL2+ IN-LINE FILTER:

CAT. YT-6083

(NOT AVAILABLE IN NEW ZEALAND)



YT-6099

	CAT.	Qty 1+	Qty 5+	Qty 20+
ADSL2+/VDSL2+ Central Filter	YT-6099	\$29.95	\$26.95	\$23.95
VDSL/ADSL In-Line Splitter / Filter	YT-6083	\$14.95	\$13.45	\$11.95

### CAT5 UTP SPLITTER

Cat5 splitters enable two different devices to share the same Cat5 cable. They are usually used in pairs, one at each outlet. Note: you can't use this device to run two computers from one network port: you'll need a network switch for that. This product is unsuitable for gigabit networks.



	CAT.	Qty 1+	Qty 4+	Qty 10+
Cat5 UTP Splitter	YT-6090	\$16.95	\$14.95	\$13.35

### MODULAR DOUBLE ADAPTOR - RJ12

Connect two telephones to the one socket.

• 6P/4C



	CAT.	Qty 1+	Qty 5+	Qty 20+
Modular Double Adaptor - RJ12	YT-6056	\$5.95	\$5.25	\$4.75

### MODULAR DOUBLE ADAPTOR - RJ45

RJ45 8P/8C plug to two sockets. Wired straight through - pin #1 to pin #1.



	CAT.	Qty 1+	Qty 5+	Qty 20+
Modular Double Adaptor - RJ45	YT-6082	\$11.95	\$10.70	\$9.50

### MODULAR TRIPLE ADAPTOR RJ12 6P/4C

RJ12 plug to 3 sockets.



	CAT.	Qty 1+	Qty 5+	Qty 20+
Modular Triple Adaptor RJ12 6P/4C	YT-6057	\$12.95	\$11.35	\$10.35

### 605 TO 610/RJ12 TELEPHONE DOUBLE ADAPTOR

Telephone double adaptor with both 610 and RJ12 6P/4C output sockets.



	CAT.	Qty 1+	Qty 5+	Qty 20+
605 to 610/RJ12 Telephone Double Adaptor	YT-6028	\$6.95	\$6.25	\$5.55

### ADSL2+ FILTER WALL PLATE

Ideal for wall-hanging land-line handsets. It provides a front-facing filtered phone port, as well as another on the side. An unfiltered port is also provided for your modem connection.

- Compatible: ADSL, ADSL2, ADSL2+, VDSL2
- Dimensions: 77(W) x 115(H) x 22(D)mm



	CAT.	Qty 1+	Qty 5+	Qty 20+
ADSL2+ Filter Wall Plate	YT-6078	\$24.95	\$22.45	\$19.95

## Tech Talk: What Is ADSL & VDSL?

ADSL stands for Asymmetric Digital Subscriber Line. It is a technology that allows data to be sent at high speeds across copper phone lines rather than conventional voice-band modems. ADSL2+ provides double the downstream rate compared to ADSL, from 12Mbps to 24Mbps. Data speed is dependent on the distance between the user's modem to the DSLAM (Digital Subscriber Line Access Multiplexer), usually located at the local telecom exchange. VDSL stands for Very-high-bit-rate Digital Subscriber Line, which provides a faster data transmission than ADSL. VDSL is able to support applications like HDTV and VOIP (Voice over IP), and able to downstream data up to 100Mbps (or 300Mbps using VDSL VPlus).

Look for our Modular Crimp Tool with Network/PoE Tester on page 311

## TELEPHONE CONNECTORS

### PLUG ADAPTOR 605 TYPE

Australian plug to RJ12 6P/4C or RJ45 8P/4C US socket.

- Includes reducing sleeve

Note: Not available in New Zealand.

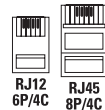


	CAT.	Qty 1+	Qty 5+	Qty 20+
Plug Adaptor 605 Type	YT-6054	\$5.95	\$5.25	\$4.75

### SOCKET ADAPTOR 610 TYPE

Australian socket to RJ12 6P/4C or RJ45 8P/4C US socket. Includes reducing sleeve.

Note: Not available in New Zealand.



	CAT.	Qty 1+	Qty 5+	Qty 20+
Socket Adaptor 610 Type	YT-6052	\$6.95	\$6.25	\$5.50

### DOUBLE ADAPTOR

Australian plug to two RJ12 6P/4C US sockets.

- Slimline package

Note: Not available in New Zealand.

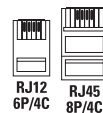


	CAT.	Qty 1+	Qty 5+	Qty 20+
Double Adaptor	YT-6023	\$6.95	\$6.25	\$5.50

### US PLUG TO AUSTRALIAN PLUG

Includes Australian plug with RJ12 6P/4C socket in back and 2 metre lead with a RJ12 8P/4C on each end.

Note: Not available in New Zealand.



	CAT.	Qty 1+	Qty 5+	Qty 20+
US Plug to Australian Plug	YT-6045	\$6.95	\$6.25	\$5.50





## ✓ RJ11/12 MODULAR

### 50µ" GOLD CONTACT

#### 4 PIN FOR STRANDED CABLE

4/4 - RJ11

#### 6 PIN FOR STRANDED CABLE

6/6 - RJ12



RJ11	CAT.	Qty 1+	Qty 5+	Qty 20+
Pkt 5	PP-1430	\$2.45	\$2.15	\$1.95
Pkt 50	PP-1431	\$19.95	\$17.95	\$15.95
RJ12	CAT.	Qty 1+	Qty 5+	Qty 20+
Pkt 5	PP-1432	\$2.95	\$2.60	\$2.30
Pkt 50	PP-1433	\$23.95	\$21.35	\$18.95

### AUSTRALIAN / NZ FLUSH WALLPLATES

Our premium Australian / NZ flush plates not only accept our Cat 5e jacks shown below, they are also compatible with many other standard Australian mechanisms and jacks. The 2 piece design has a separate back plate and cover which is easily removed for painting.

- Fits standard Australian / NZ electrical switch plate installation hardware and screw centres
- Supplied unloaded without jacks (see cat. YN-8036)
- Dimensions 116(W) x 75(H) x 13(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
Single YN-8015	\$5.95	\$5.25	\$4.75
Double YN-8016	\$5.95	\$5.25	\$4.75
Triple YN-8017	\$5.95	\$5.25	\$4.75

### KEYSTONE WALLPLATES

Flush type wall plates to accept our standard keystone 110 jacks. Fits standard Australian electrical switch plate installation hardware and screw centres, making it perfect for easy flush installation on plasterboard or other cavity walls.

- Supplied unloaded without keystone jacks
- Dimensions: 70(W) x 114(H) x 6(D)mm



CAT.	Qty 1+	Qty 5+	Qty 10+
Single White YN-8050	\$1.75	\$1.55	\$1.40
Double White YN-8052	\$1.75	\$1.55	\$1.40
Triple White YN-8054	\$1.75	\$1.55	\$1.40
Quad White YN-8056	\$1.75	\$1.55	\$1.40
6 Way White YN-8058	\$1.75	\$1.55	\$1.40

### RJ11 SOCKET 6P/4C KEYSTONE JACK

RJ11 Socket 6P/4C Keystone Jack.



CAT.	Qty 1+	Qty 5+	Qty 10+
YN-8026	\$3.95	\$3.55	\$3.15

## ✓ RJ45 MODULAR

### MODULAR PLUGS

50µ" Gold Contact

8/8 - RJ45

- Not ACMA approved



PKT	CAT.	Qty 1+	Qty 5+	Qty 20+
10	PP-1436	\$7.95	\$6.95	\$6.25

### SCREENED 8 PIN FOR STRANDED CABLE

8P/8C with full screening and round cable entry for connection to STP cable.



PKT	CAT.	Qty 1+	Qty 5+	Qty 20+
10	PP-1437	\$14.95	\$13.35	\$11.70

### RJ45 MODULAR PLUGS FOR STRANDED/SOLID CAT 6

RJ45 Modular Plugs for Stranded and Solid Cat 6 Cable. Pack of 10



RJ45 STRANDED	QTY 1+	QTY 5+	QTY 20+
Pkt 10 PP-1447	\$13.95	\$12.35	\$10.95

### 8 PIN FOR FLAT STRANDED CABLE

8/8 - RJ45

### PIN FOR ROUND SOLID CORE CABLE

8/8 RJ45 Suits Cat5e



RJ45 STRANDED	QTY 1+	QTY 5+	QTY 20+
Pkt 5 PP-1434	\$5.95	\$5.25	\$4.75

RJ45 STRANDED	QTY 1+	QTY 5+	QTY 20+
Pkt 50 PP-1435	\$29.95	\$26.95	\$23.95

RJ45 SOLID	QTY 1+	QTY 5+	QTY 20+
Pkt 6 PP-1438	\$6.95	\$6.25	\$5.50

RJ45 SOLID	QTY 1+	QTY 5+	QTY 20+
Pkt 50 PP-1439	\$34.95	\$31.45	\$27.90

### RJ45 BOOTS

A packet of boots to suit RJ45 8/8 plugs.



PKT	CAT.	Qty 1+	Qty 5+	Qty 20+
4 PM-1441	\$4.95	\$4.45	\$4.15	

PKT	CAT.	Qty 1+	Qty 5+	Qty 20+
50 Blue PM-1442	\$15.95	\$14.35	\$12.75	

### RJ45 IP67 RATED CONNECTORS

These RJ45 connectors are designed for use in harsh environments. Rated to IP67 dust and water tight making them handy for control and communications applications located outdoors or in industry workshops.



### RUGGED RJ45 PLUG - IP67 RATED

PP-1453

### RUGGED RJ45 SOCKET - IP67 RATED

PS-1451

### WATERPROOF CAP

Waterproof cap to suit PS-1451 IP67 RJ45 socket. PP-1455

CAT.	Qty 1+	Qty 10+	Qty 50+
Plug PP-1453	\$14.95	\$13.45	\$11.95
Socket PS-1451	\$19.95	\$17.95	\$15.70
Cap PP-1455	\$9.95	\$8.75	\$7.75

### KEYSTONE SOCKET JACKS

#### RJ45 SOCKET CAT5E KEYSTONE JACK

YN-8028

#### RJ45 SOCKET CAT6 KEYSTONE JACK

YN-8029



CAT.	Qty 1+	Qty 5+	Qty 10+
Cat5e YN-8028	\$3.95	\$3.55	\$3.15
Cat6 YN-8029	\$3.95	\$3.55	\$3.15

### RJ45 CAT6 KEYSTONE SOCKET - WHITE

RJ45 Cat 6 Keystone Socket - white



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8033	\$11.95	\$10.70	\$9.50

### RJ12 IDC SOCKET FOR FLUSH PLATES

Voice grade RJ12 6P/4C IDC jack with 2 IDC connections per contact allowing easy loop-in, loop-out for typical voice applications. Compatible with most standard Australian flush plates. Rear termination with IDC impact tool.



CAT.	Qty 1+	Qty 5+	Qty 20+
YN-8035	\$9.95	\$8.75	\$7.75

### CAT5E IDC JACK TO SUIT AUST / NZ STYLE FLUSH PLATES

Our premium Cat5e IDC data jack is designed to suit our wallplates shown above. They also suit many other brands of Australian/NZ flush plates.

- Rear terminated with 110 or Krone impact tool
- T568A & T568B colour coding for easy installation
- ACMA Approved
- Suits our YN-8015/16/17 wallplates



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8036	\$9.95	\$8.75	\$7.75

### RJ45 CAT5E IDC KEYSTONE JACK - PK 6

This pack of 6 Cat5e keystone jacks are designed to suit standard Australian & New Zealand wall plates.

- Rear terminated with 110 or Krone impact tool
- T568A & T568B colour coding for easy installation
- ACMA approved
- Suits YN-8015/6/7 wall plates



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8039	\$39.95	\$35.90	\$31.90

### RJ45 CAT6 TOOL-LESS KEYSTONE JACK

This Cat6 keystone jack allows you to connect Ethernet cable without the need of crimping tools.

- Installation is quick and easy

Note: Product may vary to one shown.

CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8038	\$16.95	\$14.95	\$13.35



### KEYSTONE SURFACE BOX

Side entry surface mount boxes to accept our standard keystone 110 jacks.

- Snap-on cover for easy installation & access to wiring.
- Single and duplex versions available
- Double sided tape for easy installation
- Supplied unloaded without keystone jacks
- Colour is white



WXHX-D(MM)	CAT.	Qty 1+	Qty 4+	Qty 10+
Single 30x60x26	YN-8022	\$5.95	\$5.25	\$4.75
Double 55x60x26	YN-8024	\$5.95	\$5.25	\$4.75

### 110 KEYSTONE JACK

Suitable for use with our keystone wall plates and keystone surface boxes.

- For termination with ISBY impact tool and has combined 568A and T568B colour coding for easy installation
- White in colour



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8030	\$9.95	\$8.75	\$7.75



## ✓ RJ11/12 MODULAR (CONTINUED)

### CAT5 COUPLER 8P/8C

Enables pre-made cables to be used. Simply clip into a wall plate and plug cables in on both sides.



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8032	\$19.95	\$17.95	\$15.70

### CAT5 SOCKET COUPLER STRAIGHT

Use this jack connector to join two fabricated Cat5e cables.

- Straight through



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8034	\$16.95	\$14.95	\$13.35

### CAT6 RJ45 INLINE COUPLER

Use this coupler to join two fabricated Cat6 cables.

- Wired straight through



CAT.	Qty 1+	Qty 4+	Qty 10+
YN-8037	\$19.95	\$17.95	\$15.95

### US MODULAR INLINE COUPLER SOCKET TO SOCKET 6P/4C

Connect two US plugs together.



RJ12 6P/4C



CAT.	Qty 1+	Qty 5+	Qty 20+
YT-6060	\$5.95	\$5.25	\$4.75

### MODULAR INLINE JOINER RJ45 8P/8C

RJ45 8P/8C socket to socket. Wired straight through. Pin #1 to pin #1.

Note: Not suitable for Ethernet connections.



CAT.	Qty 1+	Qty 5+	Qty 20+
YT-6080	\$4.95	\$4.45	\$3.90

### MODULAR INLINE JOINER RJ45 8P/8C CROSSOVER

RJ45 8P/8C socket to socket. Wired in crossover format. Pin #1 to pin #8.

Note: Not suitable for Ethernet connections.



CAT.	Qty 1+	Qty 5+	Qty 20+
YT-6081	\$5.95	\$5.25	\$4.75

### US MODULAR SKIRTING MOUNT WALL SOCKET RJ12 6P/4C

US type wall socket. Suitable for all telephones.



CAT.	Qty 1+	Qty 5+	Qty 20+
YT-6058	\$6.50	\$5.75	\$4.95

### DB9 SOCKET TO RJ45

Socket adaptor. Can be wired without soldering.

- Unwired



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-0906	\$5.95	\$5.25	\$4.75

### DB25 PLUG TO RJ45 8P/8C SOCKET ADAPTOR

Unwired. Can be wired without soldering.



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-0904	\$7.95	\$6.95	\$6.25

### WALL SOCKET - 6P/4C

Square wall socket to suit RJ12 6P/4C plugs. Screw terminals for connection.

- 44 x 44 24(D)mm



CAT.	Qty 1+	Qty 5+	Qty 20+
YT-6059	\$5.95	\$5.25	\$4.75

### RJ45 SIDE ENTRY SURFACE MOUNT - 8P/8C

Side entry surface mount voice grade US modular socket. Snap-on cover provides access to screw terminals for connection of wires. Double sided tape included for easy installation.

- 50(W) x 57(H) x 20(D)mm



CAT.	Qty 1+	Qty 5+	Qty 20+
YT-6064	\$6.50	\$5.75	\$4.95

### RJ45 TO RJ12 REDUCERS

Reduce a RJ45 size socket to a RJ12 size. This allows RJ45 sockets to accept either RJ12 or RJ45 plugs. Pack of 5.



CAT.	Qty 1+	Qty 5+	Qty 20+
Pkt 5 YT-6055	\$4.95	\$4.45	\$3.90

### WALL PHONE BRACKET RJ12 6P/4C

Wall phone bracket designed to allow easy installation of telephones which have standard US modular wall mountings.

The line is connected from bracket to phone by a 30mm modular cord.

- Fits standard Australian electrical switch plate installation hardware
- 76W x 119H x 9Dmm

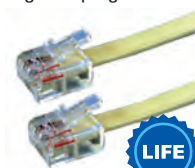


CAT.	Qty 1+	Qty 5+	Qty 20+
YT-6062	\$7.95	\$6.95	\$6.25

### EXTENSION CABLES RJ12 6P/4C

RJ12 6P/4C US Modular Plugs US plug to US plug.

- Colour Ivory



CAT.	Qty 1+	Qty 5+	Qty 20+
300mm YT-6044	\$3.95	\$3.45	\$3.15
1.0m YT-6042	\$4.95	\$4.45	\$3.90
3.0m YT-6040	\$5.95	\$5.25	\$4.75
5.0m YT-6049	\$7.95	\$6.95	\$6.25
10.0m YT-6041	\$11.95	\$10.70	\$9.50
15.0m YT-6043	\$14.95	\$13.35	\$11.70

### EXTENSION CABLES RJ12 6P/6C

Used in many office telephone Commander type systems, where 6 wires are required. Plug to plug.

- RJ12 6P/6C US Modular Plugs
- Colour Ivory



CAT.	Qty 1+	Qty 5+	Qty 20+
1.0m YT-6033	\$9.95	\$8.75	\$7.75
3.0m YT-6036	\$11.95	\$10.70	\$9.50
5.0m YT-6034	\$12.95	\$11.35	\$10.35
10.0m YT-6037	\$13.95	\$12.35	\$10.95
15.0m YT-6038	\$16.95	\$14.95	\$13.35

### REPLACEMENT HANDSET CURLY CORD 4P/4C US Modular Plugs.



CAT.	Qty 1+	Qty 5+	Qty 20+
3.0m White YT-6047	\$8.95	\$7.95	\$6.95

### RJ12 TO RJ45 MODULAR LEADS

RJ12 6P/4C to RJ45 8P/4C Colour: Ivory.



CAT.	Qty 1+	Qty 5+	Qty 20+
2.0m YT-6086	\$8.95	\$7.95	\$6.95
3.0m YT-6087	\$12.95	\$11.35	\$10.35

## Select Your Model: UHF Transceivers, Handheld

	DC-1017	DC-9045	DC-1009	DC-1027	DC-9046	DC-9048	DC-1049	DC-1074	DC-9054	DC-1068
Max Output Power	0.5W	0.5W	0.5W	0.5W	1W	2W	2W	3W	5W	5W
Range (line-of-sight)	3km	3km	3km	3km	6km	9km	10km	10km	14km	20km
Rechargeable			•	•	•	•	•	•	•	•
Pair	•	Quad	•	•						
CTCSS				•	•	•	•	•	•	•
Waterproof (IPX7)								IP67	IPX7	IP67
VOX				•	•	•	•	•	•	•
Repeater Function	•	•	•	•			•			•
Charging Dock			•	•				•		•
Supports 12V Car Charging				(Optional)	(Optional)	(Optional)	•		(Optional)	•
Supports Headset				•	•	•	•	•	•	•
Page	333	333	333	333	334	334	334	335	335	335

### 0.5W UHF CB RADIO TWIN PACK - 80 CHANNEL

MADE FOR KIDS, 0.5W, GREAT VALUE

Two pack of mini UHF CB radios with up to 3km range. Ideal for keeping in touch with the kids at campsites, picnics, skiing and hiking trips. They retain many of the features and build quality of more expensive units but come in a child friendly package. Also features a built-in LED torch to find your way in the dark.

- Up to 3km range
- 80 Channels
- Push to Talk (PTT) function
- Scan channel, call tone & monitor
- Duplex range extender
- Low battery alert
- Requires 3 x AAA batteries per unit
- LED Torch
- Supplied as a pair in red & blue
- Dimensions: 110(L) x 55(W) x 35(D)mm



### 0.5W UHF TRANSCEIVER - 80 CHANNEL - RECHARGEABLE

ECONOMY RECHARGEABLE, 0.5W, PAIR

Out in the bush and you need to read a map in the dark? No problem! Your CB has an LED torch built in to it. Naturally it does all the normal CB functions as well and includes desktop charging cradle, AC adaptor, two transceivers and batteries.

- Up to 3km range
- 80 channels
- Push to Talk (PTT) function
- Scan function
- Auto squelch function
- Up to 30 hours battery life
- Charging time: 6 hours
- LED Torch
- Sold as a pair
- Dimensions: 110(L) x 55(W) x 35(D)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
0.5W Transceivers - Twin Pack	DC-1017	\$49.95	\$44.90	\$39.90

	CAT.	Qty 1+	Qty 5+	Qty 10+
0.5W Transceivers - Twin Pack	DC-1009	\$69.95	\$62.95	\$55.95

### UNIDEN HANDHELD UHF TRANSCEIVER QUAD PACK

These are the ultimate communications for the boating and bushwalking family. At this price, all family members can keep in touch. Each two-way radio is small enough to fit in your pocket but is loud and clear enough to hear through your clothes. At 1/2W, it is the perfect compromise of range and battery economy. Each unit has 80 channel capacity, auto battery charge level indicator, auto channel scan, duplex range extender, auto squelch and a rugged belt clip. Engineered in Japan. 4 attractive colours.

- Up to 3km range
- 80 Channels
- Scan channel, auto squelch
- Duplex range extender
- Up to 20 hours battery life
- Battery level indicator
- Requires 3 x AAA batteries per unit
- LCD Display
- Supplied as pack of four
- Dimensions: 138(L) x 50(W) x 30(D)mm



Uniden

	CAT.	Qty 1+	Qty 10+
	DC-9045	\$99.95	\$94.95

### 0.5W UHF TRANSCEIVERS - 80 CHANNEL - RECHARGEABLE

FULL FEATURE RECHARGEABLE, 0.5W, PAIR

Everything you need for mobile CB communications. 80 channel UHF CB radios complete with rechargeable batteries, dual charger cradle and a range of accessories. They have 0.5 watt output for up to 5km transmission range and CTCSS function. Ideal for bushwalking, camping, sports, etc.

- Up to 3km range
- 80 channels
- Scan, CTCSS & VOX function
- Repeater function
- Key lock/tone function
- Auto squelch function
- Battery level indicators
- Rechargeable via AC-DC
- Backlit LCD
- Sold as a pair
- Dimensions: 135(L) x 54(W) x 35(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
0.5W UHF Transceiver - Pair	DC-1027	\$109.00	\$97.95	\$86.95
<b>ACCESSORIES TO SUIT</b>				
	CAT.	Qty 1+	Qty 5+	Qty 10+
Spare Rechargeable Battery	DC-1029	\$14.95	\$13.35	\$11.70
Cigarette Lighter Charger	DC-1036	\$17.95	\$15.95	\$14.35
Mains Charger	DC-1034	\$17.95	\$15.95	\$14.35
Leather Pouch	DC-1018	\$6.95	\$6.25	\$5.50
Earpiece with Throat Mic	DC-1039	\$24.95	\$22.45	\$19.95
VOX Headset & Microphone	DC-1056	\$14.95	\$13.35	\$11.70
Air Tube Headset	DC-1031	\$39.95	\$35.90	\$31.90





## UHF TRANSCEIVERS (CB RADIOS) (CONTINUED)

### GME 1W UHF TRANSCEIVERS - TX665

This 1 watt UHF CB radio is both compact and lightweight with up to 17 hours battery life. It has a USB multi-charging system for charging on the go. 17 hours operating time using low output power, 12 hours using high output power (Based on 5% transmitting, 5% receiving and 90% waiting mode).

- Up to 6km range
- 80 Channels
- Switchable power output (1W/0.5W)
- Scan, CTCSS & VOX function
- Dual watch, monitor two channels
- Key lock/tone function
- DCS digital coded squelch
- Li-ion rechargeable battery
- Recharge via USB
- Backlit LCD
- Sold individually & twin pack
- Dimensions: 90(L) x 52(W) x 30(D)mm

Two models available:

#### SINGLE PACK:

TX665 UHF handheld radio  
Li-ion battery pack (1000mAh)  
USB power supply and lead  
Belt clip

DC-4046



#### TWIN PACK:

- Two TX667 Transceivers
- Twin desktop charger
- 1000mAh Li-ion batteries
- Belt clips
- USB power supply
- USB charging lead

DC-9047



### 2 WATT UHF TRANSCEIVER WITH CTCSS - 80 CHANNEL ADVANCED

With 2 watts of output power, this UHF transceiver is certainly no toy. This top quality unit will suit many professional and leisure activities with a range of up to 10km line-of-sight. You can save battery power by switching to the low setting (500mW) for local communications (such as around the campsite). It's loaded with all the features you would expect from an advanced system like CTCSS that reduces interference from other users on the same channel, 75 voice channels, plus it has a rechargeable Li-ion battery with a plug pack charger.

- Up to 10km range
- 80 channels
- Switchable power output (2W/0.5W)
- Scan, CTCSS & VOX function
- Key lock/tone function
- Auto squelch function
- Low battery display
- Li-ion rechargeable battery
- Backlit LCD
- Sold individually
- Dimensions: 120(L) x 57(W) x 35(H)mm



	CAT.	Qty 1+	Qty 10+
1W UHF Transceiver - Single	DC-9046	\$89.95	\$84.95
1W UHF Transceivers - Twin Pack	DC-9047	\$145.00	\$136.95
ACCESSORIES TO SUIT	CAT.	Qty 1+	Qty 10+
Speaker Mic	DC-9024	\$66.95	\$62.95
Ear Mic	DC-9026	\$33.95	\$31.95
Dual Desktop Charger*	DC-9038	\$33.95	\$31.95
Leather Case	DC-9030	\$21.95	\$20.45
Belt Clip	DC-9034	\$10.95	\$9.95
Spare Battery 1,000mAh	DC-9036	\$28.95	\$27.45

	CAT.	Qty 1+	Qty 5+	Qty 10+
2W UHF Transceiver - Single	DC-1049	\$89.95	\$80.95	\$71.95
ACCESSORIES TO SUIT	CAT.	Qty 1+	Qty 5+	Qty 10+
In-dash Car Charger	DC-1035	\$17.95	\$15.95	\$14.35
Speaker Mic	DC-1062	\$24.95	\$22.35	\$19.70
Spare Battery	DC-1048	\$29.95	\$26.90	\$23.70
Leather Pouch	DC-1042	\$9.95	\$8.75	\$7.75
Earpiece with Throat Mic	DC-1039	\$24.95	\$22.45	\$19.95
VOX Headset & Microphone	DC-1056	\$14.95	\$13.35	\$11.70
Air Tube Hadset	DC-1031	\$39.95	\$35.90	\$31.90

### GME 2W UHF TRANSCEIVER TX677

The TX677 2 watt UHF CB two way radio is both compact and lightweight, featuring a flexible detachable antenna, rotary power/volume control and a USB multi-charging system for charging on the go. It offers 14 hours operating time using low output power, and up to 10 hours using high output power (based on 5% transmitting, 5% receiving and 90% waiting mode).

- Up to 9km range
- 80 Channels
- Switchable power output (2W/0.5W)
- Scan, CTCSS & VOX function
- Dual watch, monitor two channels
- Key lock/tone function
- DCS digital coded squelch
- Li-ion rechargeable battery
- Recharge via USB
- Backlit LCD
- Sold individually & twin pack
- Dimensions: 90(L) x 52(W) x 30(D)mm

#### THREE MODELS AVAILABLE:

##### Included: (Transceiver Only)

- TX677 Radio
- Li-ion battery pack (1600 mAh)
- AC adaptor
- USB/Micro USB lead
- Belt Clip

DC-9048

##### Included: (Twin Pack)

- Two TX677 transceivers
- Twin desktop charger
- 12V vehicle charger
- 1600mAh Li-ion batteries
- Belt clips
- USB power supply
- USB charging lead

DC-9049

##### Included: (Quad Pack)

- 4 x TX675 Radios
- 4 x Li-ion battery packs (1600 mAh)
- 4 x Belt Clips
- 2 x Twin desktop charger
- 2 x 12v vehicle charger
- 2 x USB/Micro USB lead
- 1 x AC adaptor
- 1 x Instruction manual
- 1 x Rugged premium carry case

DC-9050

\*Accessories not stocked in all stores but can be ordered.

	CAT.	Qty 1+	Qty 10+
2W UHF Transceiver - Single	DC-9048	\$109.00	\$102.95
2W UHF Transceivers - Twin Pack	DC-9049	\$209.00	\$197.95
2W UHF Transceivers - Quad Pack	DC-9050	\$399.00	\$379.00
ACCESSORIES TO SUIT	CAT.	Qty 1+	Qty 10+
Speaker Mic	DC-9024	\$66.95	\$62.95
Ear Mic	DC-9026	\$33.95	\$31.95
Dual Desktop Charger	DC-9028	\$33.95	\$31.95
Spare Battery	DC-9044	\$46.95	\$43.95
Leather Case	DC-9030	\$21.95	\$20.45
Replacement Antenna	DC-9032	\$46.95	\$43.95
Belt Clip	DC-9034	\$10.95	\$9.95



WARRANTY



## 3W WATERPROOF FLOATING UHF TRANSCEIVER

A robust floating transceiver suitable for professional or recreational use. A 10km line-of-sight range will allow you to keep in contact over large distances and IP67 rating means it can be submersed in up to 1m of water. Battery power can be conserved by switching to the low setting (500mW) for local communications around base camp. Includes a rechargeable Li-ion battery with a charging cradle and power supply. There are 75 voice channels and the CTCSS system reduces interference from users on other channels. Great for camping, off-road race crews, roadies, people who work at large sporting venues, and more.

- Up to 10km range
- 80 channels
- IP67 weatherproof
- Switchable power output (3W/0.5W)
- Scan, CTCSS & VOX function
- Key lock/tone function
- Auto squelch function
- Low battery display
- Li-ion rechargeable battery
- Backlit LCD
- Sold individually & twin pack
- Dimensions: 120(L) x 57(W) x 35(H)mm

### TRADIES PACK:

- 2 x 3W UHF Transceivers
- 2 x Mini Speakers/Microphones
- 2 x 12V cigarette lighter chargers
- 2 x VOX Headset & Microphone
- 1 x Dual charging cradle with mains supply



	CAT.	Qty 1+	Qty 5+	Qty 10+
3W UHF Transceiver - Single	DC-1074	\$129.00	\$115.95	\$102.95
3W Tradies Pack	DC-1076	\$329.00	\$299.00	\$265.00
ACCESSORIES TO SUIT	CAT.	Qty 1+	Qty 5+	Qty 10+
Spare Battery	DC-1075	\$24.95	\$22.45	\$19.95

## 5W UHF HANDHELD TRANSCEIVER

Ultra high powered UHF transmission from a compact handheld unit. It has all the feature you would expect such as 1W/5W power selection (to save battery), CTCSS, VOX, and a large backlit LCD. Advanced repeater and triple-watch features are on-board too, often reserved for more expensive units. Providing up to 20km range in a weatherproof case, it's exceptionally good value. Includes Li-ion rechargeable battery pack, AC adaptor, charging cradle and belt clip.

- Up to 20km range
- 80 channels
- IP67 weatherproof
- Switchable power output (5W/1W)
- Scan, CTCSS & VOX function
- Key lock/tone function
- Auto squelch function
- Low battery display
- Li-ion rechargeable battery
- Backlit LCD
- Sold individually & twin pack
- Dimensions: 119(L) x 60(W) x 45(D)mm

### Included:

- DC-1068 Radio
- Li-ion battery pack
- Removable flexible antenna
- AC adaptor & charging cradle
- Belt clip

### Included: (Tradies Pack)

- 2 x 5W UHF Transceivers
- 2 x Mini Speakers/Microphones
- 2 x 12V cigarette lighter chargers
- 2 x VOX Headset & Microphone
- 1 x Dual charging cradle with mains supply



	CAT.	Qty 1+	Qty 5+	Qty 10+
5W UHF Transceiver - Single	DC-1068	\$189.00	\$169.95	\$150.95
5W Tradies Pack	DC-1069	\$449.00	\$399.00	\$359.00
ACCESSORIES TO SUIT	CAT.	Qty 1+	Qty 5+	Qty 10+
Cigarette Lighter Charger	DC-1099	\$17.95	\$15.95	\$14.35
Speaker Mic	DC-1062	\$24.95	\$22.35	\$19.70
Earpiece with Throat Mic	DC-1039	\$24.95	\$22.45	\$19.95
VOX Headset & Microphone	DC-1056	\$14.95	\$13.35	\$11.70
Air Tube Headset	DC-1031	\$39.95	\$35.90	\$31.90

## GME 5W UHF TRANSCEIVER - TX6160

This rugged Australian designed handheld UHF radio is built with a diecast chassis and is rated IP67 water and dust proof. With a powerful 2600mAh lithium ion battery pack and intelligent battery management it can operate for a maximum of 30 hours on low power or 15 hours on high power - 50% longer than any other 5W UHF CB radio. It is equipped with a super sensitive receiver with input filtering and has an extensive list of innovative software features in scanning, memory, signal processing and privacy.

- Up to 14km range
- 80 Channels
- Switchable power output (5W/1W)
- IP67 weatherproof
- Scan, CTCSS & VOX function
- Dual watch, monitor two channels
- Key lock/tone function
- DCS digital coded squelch
- Li-ion rechargeable battery
- Recharge via USB
- Backlit LCD
- Sold individually & twin pack
- Dimensions: 102(L) x 57(W) x 35(D)mm

### THREE MODELS AVAILABLE:

#### Included: (Transceiver Only)

- TX6160 Radio
- Li-ion battery pack (2600mAh)
- Removable flexible antenna
- AC adaptor
- Belt clip

DC-9054

#### Included: (Accessories Pack)

- Earpiece style microphone with VOX & PTT
- IP67 speaker microphone
- Desktop rapid charger with mains adaptor
- In-car charging lead

DC-9052

#### Included: (Twin Pack)

- Two TX6160 transceivers
- Earpiece style microphone with VOX & PTT
- IP67 speaker microphone
- Desktop rapid charger with mains adaptor
- In-car charging lead

DC-9053

\*Accessories not stocked in all stores but can be ordered.

	CAT.	Qty 1+	Qty 10+
5W UHF Transceiver Only	DC-9054	\$249.00	\$229.00
5W UHF Transceiver - with Accessories	DC-9052	\$319.00	\$299.00
5W UHF Transceiver - Twin Pack	DC-9053	\$579.00	\$549.00
ACCESSORIES TO SUIT	CAT.	Qty 1+	Qty 10+
Accessories Pack	DC-9055	\$99.00	\$93.95
Speaker Mic*	DC-9024	\$66.95	\$62.95
Ear Mic*	DC-9026	\$33.95	\$31.95
Dual Desktop Charger	DC-9022	\$76.95	\$72.95
Spare Battery 2,600mAh	DC-9020	\$154.95	\$146.95







## ✓ UHF TRANSCEIVERS (CB RADIOS) (CONTINUED)

### 5W UHF CB RADIO - UNDER DASH

This unit allows you to remotely locate the transmit/receive base unit and only have the microphone itself within easy reach. All functions for the unit are on the face of the microphone, there are no controls on the power unit at all. The microphone has a speaker in it, which enables you to completely control the transceiver from this unit.

- 5W max output
- 80 channels
- Operating voltage 12-24VDC
- 100 User Programmable RX Channels
- CTCSS(38) & DCS(104) status codes
- Channel / Memory Scan
- Group Scan
- Key and ringer tone selection
- Backlit LCD and keypad
- Dimensions:  
127(W) x 100(L) x 25(H)mm (Base Unit)  
102(H) x 57(W) x 27(D)mm (Microphone)



### GME 5W UHF IN-DASH ULTIMATE PACK - TX3350UVP

A feature packed super compact UHF CB radio with the new SoundPath® full function LCD speaker microphone. The microphone has a built-in speaker with clear audio, all within a compact and ergonomic design. SoundPath® diverts the audio through a unique convex path around the microphone bollard, whilst maintaining the compact size. Because the controls are on the microphone the radio can be discretely installed in almost any location within a vehicle and without the need for extension speakers. Supplied with two interchangeable antenna masts for rugged and flat terrain, along with two different mounting brackets.

- 5W max output
- 80 channels
- Operating voltage 10-15VDC
- Digital signal processing
- CTCSS, DCS and adjustable squelch
- Selectable duplex channels
- Dynamic volume control
- SoundPath® speaker microphone
- Programmable scan function
- Backlit LCD and keypad
- Dimensions:  
102(W) x 87(L) x 23(H)mm (Base Unit)

#### Included:

- TX3350 radio
- LCD speaker microphone & clip
- 6.6dBi ground independent antenna with 4.5m lead
- 2.1dBi low gain replacement antenna whip
- Universal "Z" bonnet/boot antenna mount
- Universal bull bar antenna mount
- Cigarette lighter DC power lead
- Mounting Cradle and screw pack



\*Replacement microphone not stocked in all stores but can be ordered.

	CAT.	Qty 1+	Qty 5+	Qty 10+
5W UHF Radio	DC-1122	\$249.00	\$225.00	\$198.95
Antenna to suit	DC-3078	\$99.95	\$89.95	\$79.95
<b>ACCESSORIES TO SUIT</b>	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 5+</b>	<b>Qty 10+</b>
Mic Bracket Clip	DC-3080	\$5.95	\$5.25	\$4.75
Replacement Microphone	DC-1125	\$79.95	\$71.95	\$63.95

### TRANSCEIVER UHF 5W START PK GME TX3100VP

Begin your UHF CB experience with everything you need from the get-go. The super compact size and power, combined with its ease of use, makes it a perfect UHF CB radio for all types of users. Coupled with a high performance antenna and mounting bracket, this Starter Kit is all you'll need in the one box!

- 5W max output
- 80 channels
- Operating voltage 10-15VDC
- Digital signal processing
- CTCSS, DCS and adjustable squelch
- Selectable duplex channels
- Dynamic volume control
- Display flip function
- Programmable scan function
- Dimensions 102(W) x 87(L) x 23(H)mm (Base Unit)

#### Included:

- TX3100 radio
- Microphone & clip
- 6.6dBi ground independent antenna with 4.5m lead
- Universal "Z" bonnet/boot antenna mount
- Cigarette lighter DC power lead
- Radio mounting bracket and screw pack



\*Accessories not stocked in all stores but can be ordered.

	CAT.	Qty 1+	Qty 6+
	DC-9014	\$329.00	\$309.00
<b>ACCESSORIES TO SUIT DC-9014</b>	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 10+</b>
Suction Mount Bracket*	DC-9040	\$46.95	\$43.95
Microphone to suit*	DC-9042	\$53.95	\$50.95



## Smart Hardware Competition: - SHANE HOPCROFT, SHOPS AT JAYCAR EAST KEW

"We have a old second-hand fridge at work that we use for Friday arvo drinks. We wanted an internet-enabled fridge, so I added an arduino powered monitoring system, which uses DS18B20 sensors to collect the fridge temperature, the beer temperature (through a sensor in a dedicated sensor bottle), as well as the room temperature. The data is transmitted to the cloud every via a clone of a Yun shield every three seconds. Now we can access up-to-date beer temperature through Slack (our office collaboration tool). There are also plans to write an iOS app so we can check the current beer temperature through our phones."





## GME UHF Transceiver XRS-330CP Portable Pack:

The all new XRSTM Portable Pack is perfect for casual users and owners of high-end vehicles who do not wish to permanently install a UHF radio in their vehicle.

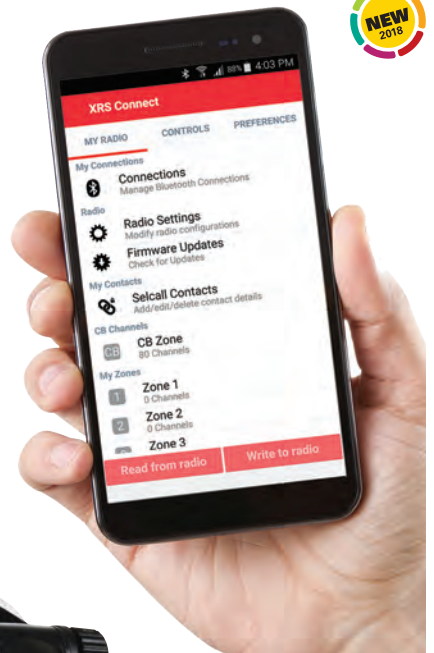
The XRS-330CP comes with everything you need to get started – the premium XRS-330C UHF CB Radio, suction cup mount, 12V Accessory lead, 2.1dBi magnetic antenna and all mounting hardware – contained within a handy carry case for convenient storage when the radio is not in use.

The XRS Connect professional grade speaker microphone features a powerful 2 watt speaker, customisable buttons and a high contrast OLED screen guaranteeing crystal clear, anti-glare display.

Enabled by Bluetooth® wireless technology, XRSTM is the first of a new generation of connected UHF radios with unique features never before seen.

Visit Google Play or the App Store and search 'XRS Connect'.

App compatible with iOS9.0, Android 5.0 and above



- 5W max output
- 80 channels
- Operating voltage 10-16VDC
- Bluetooth connectivity
- Digital signal processing
- CTCSS, DCS and adjustable squelch
- Selectable duplex channels
- Dynamic volume control
- XRS Connect speaker microphone
- Programmable scan function
- Backlit OLED display
- Dimensions: 117(W) x 128(L) x 29(H)mm (Base Unit)

### Included:

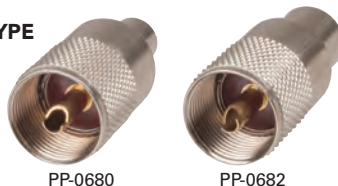
- XRS-330C radio
- XRS speaker microphone & clip
- 2.1dBi magnetic antenna
- 12V DC power lead
- Mic extension lead & adaptor kit
- Premium carry case
- Suction cup mounting bracket
- Mounting bracket, screw kit & manual



	CAT.	Qty 1+	Qty 10+
	DC-9056	\$529.00	\$499.00

## UHF TRANSCEIVERS (CB RADIOS) ACCESSORIES

### UHF LINE PLUGS - PL259 TYPE



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Solder - RG 58U - with Reducer	PP-0680	\$2.95	\$2.60	\$2.30
Solder - RG-8U	PP-0682	\$2.95	\$2.60	\$2.30

### 50 OHM RG58/U COAX CABLE

Suited up to 500MHz, ideal for CB, marine, amateur and two-way radio.

- Sold by the metre or by the 100m roll

For full specifications see page 182.



	CAT.	Per Metre	1+ Rolls	5+ Rolls
50 Ohm RG58/U Coax Cable	WB-2010	\$1.45	\$120.00	\$100.00

### UHF JOINER & SOCKET



TYPE	CAT.	Qty 1+	Qty 10+	Qty 50+
Joiner - Double Female	PS-0690	\$3.95	\$3.45	\$3.15
S0239 Chassis Socket	PS-0686	\$2.95	\$2.60	\$2.30

### ROTARY COAX STRIPPER

This handy stripper will strip the outside jacket and inner conductor in one operation.

- Suitable for RG58/59/62/6 and 3C2V 75 ohm cable
- Simply rotate the stripper clockwise around the cable 3 to 6 times. A quality stripper suited to installers



	CAT.	Qty 1+	Qty 3+	Qty 6+
Rotary Coax Stripper	TH-1820	\$19.95	\$17.95	\$15.95



## UHF ANTENNAS & ACCESSORIES

### UHF PREMIUM ANTENNA KITS

Robust and durable antennas for UHF communications. Independent ground plane to ensure stable radiation pattern in all mobile mounting applications. Two models to choose from. Each feature 5m pre-terminated cables with FME socket and PL259 adaptor so no tools are required.

#### 4DBI FLEXIBLE UHF ANTENNA

- 407mm long
- Includes 'L' guard mount bracket

DC-3073



SPECIFICATIONS	DC-3073
Frequency	476.42 - 477.40MHz
Gain	4dBi
VSWR	<1.5:1
Impedance	50 Ohms
Polarization	Vertical
Radiation	Omni Directional
Cable	LL195 Low loss, 5m length
Termination	FME socket + UHF plug to FME plug adaptor
Base Materials	Stainless Steel Brass
Antenna Length	407mm

#### PREMIUM UHF ANTENNA WITH 3DBI & 6.5DBI ANTENNAS

- Stainless spring & elevated feed base
- 450mm (3dBi) and 900mm (6.5dBi) long
- Includes 'L' guard mount bracket and bull bar bracket

DC-3071

SPECIFICATIONS	DC-3071
Frequency	476 - 477MHz
Gain	3dB, 6.5dB* (* Reference to 1/4 waves mounted on centre of Vehicle Roof)
Input Impedance	50 Ohms
Radiation Pattern	Omni directional
Antenna Materials	Brass & flexible polypropylene radome
Antenna Weight	190g
Cable	LL195 Low loss, 5m Length
Termination	FME socket + UHF plug to FME plug adaptor
Antenna Length	407mm 450mm 900mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
4dBi	DC-3073	\$79.95	\$71.95	\$63.95
3dBi & 6.5dBi	DC-3071	\$129.00	\$115.95	\$102.95

### UHF 5DBI FIBREGLASS ANTENNA WITH 5M CABLE

Another addition to our antenna range. This model is suitable for cars and trucks using UHF transceivers. The antenna is fibreglass and it features a tough flexible spring base to absorb and deaden the vibrations associated with driving.



SPECIFICATIONS	DC-3078
Frequency	477MHz for UHF
Cable Connector	FME
Gain	5dBi
Length	630mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
UHF 5dBi Fibreglass Antenna with 5m Cable	DC-3078	\$99.95	\$89.95	\$79.95

### UHF 4.5DB BLACK WHIP

Offers at least 4.5dB gain.

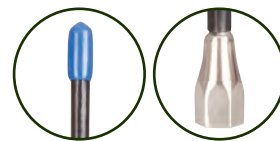
- Black powder coated
- Stainless steel whip
- Length 565mm
- Suits standard UHF 5/16" base DC-3062 on this page

	CAT.	Qty 1+	Qty 5+	Qty 10+
4.5dB	DC-3074	\$22.95	\$20.35	\$18.35

### EXTERNAL UHF ANTENNA

For use with our external antenna base (DC-3066) or any other antenna base with suitable connecting thread.

- Operating Frequency: 477MHz
- Gain: 5-6dBi
- Impedance: 50Ohm
- Length: 650mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
5-6dB	DC-3076	\$19.95	\$17.70	\$15.70

### PLASTIC MICROPHONE BRACKET

Microphone bracket clip to suit DC-1120 UHF handset. The back plate features mounting holes for screwing it in and is flat enough to use double sided adhesive tape. Stainless steel mounting screws included.

- Dimensions: 33mm x 36mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Plastic Microphone Bracket	DC-3080	\$5.95	\$5.25	\$4.75

### METAL MICROPHONE BRACKET

Microphone bracket clip to suit most UHF/VHF receiver handsets. The metal plate features mounting holes for screwing it in for a solid mount.

- 3 screws Included



	CAT.	Qty 1+	Qty 5+	Qty 10+
Metal Microphone Bracket	DC-3082	\$7.95	\$7.15	\$6.35

### UHF BASE

Constructed from UV stable polypropylene and a 5/16", 26TPI plated brass bolt.



	CAT.	Qty 1+	Qty 5+	Qty 10+
UHF Base	DC-3062	\$12.95	\$11.35	\$10.35

### UNIVERSAL CB BASE

Standard 5/16" 26TPI low profile base complete with solder lugs for cable connection.



	CAT.	Qty 1+	Qty 5+	Qty 10+
Universal CB Base	DC-3060	\$10.95	\$9.75	\$8.75

### UHF EXTERNAL ANTENNA BASE WITH CABLE

Designed for use with our fixed installation transceiver unit (DC-1120) to enable you to connect an antenna. The antenna base can be mounted to a bracket and the PL259 plug will connect to the UHF unit.

- PL259 connection: 17(Dia.)mm
- RG58 Coax Cable
- Antenna base dimensions: 44(Dia.) x 40(H)mm
- Cable length: 4500mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
UHF Base with Cable	DC-3066	\$29.95	\$26.95	\$23.95

### 27MHZ HELICAL WHIP

High performance helical fibreglass mobile whips designed and manufactured in Australia to suit our rugged conditions. All with standard 5/16" 26TPI thread.



	CAT.	Qty 1+	Qty 4+	Qty 10+
900mm	DC-2030	\$16.75	\$14.95	\$13.35

## Find Out More In Store:

Our staff offer friendly and helpful service.  
We're here to help.

## Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck\*.

\*Conditions apply – see page 526 For details

## ✓ UHF ANTENNA MOUNTING

### TRUNK GROOVE BRACKET - Z SHAPE

Polished stainless steel bracket in a Z shape to mount an antenna on the vehicle boot or bonnet.

SPECIFICATIONS	DC-3075
Antenna Mounting	16mm
Mounting Holes	4 x 4.6mm
Cable Entry	5.5mm
Back Plate	52(W) x 57(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Trunk Groove Bracket - Z Shape	DC-3075	\$9.95	\$8.95	\$7.95

### RIGHT ANGLE BULL BAR BRACKET STAINLESS STEEL

This stainless steel bracket will allow you to attach an antenna to your vehicles bull bar to improve reception to your UHF radio. For those who frequently work or travel to remote areas this is ideal.

- Dimensions of L bracket: 56 x 57 x 54mm
- Length of U brackets 72mm
- Material: 304 Grade Stainless steel



	CAT.	Qty 1+	Qty 5+	Qty 10+
Right Angle Bull Bar Bracket Stainless Steel	DC-3077	\$14.95	\$13.35	\$11.70

### UNIVERSAL BULLBAR MOUNTING BRACKETS

These brackets are designed to mount driving lights, spotlights, UHF antenna's and other various applications to a tube frame (such as a bull-bar). Allows for much easier attachment to bull-bars, trailer railing, ute roll-bars or even a roof rack. Stainless steel construction with shockproof rubber insulation so your tube frame isn't scratched or dented.

Ideal for use with our range of 12VDC LED lights SL-3914, SL-3912, SL-3916, SL-3918, SL-3920 and SL-3922.

- Can be adapted to mount driving lights
- 3 sizes available to fit various diameter frames:



	CAT.	Qty 1+	Qty 2+	Qty 6+
25-38mm	SL-3925	\$14.95	\$13.35	\$11.70
40-52mm	SL-3927	\$14.95	\$13.35	\$11.70
70-80mm	SL-3929	\$19.95	\$17.70	\$15.70

## ✓ MINI COMMS SPEAKERS

### 4" COMMUNICATION SPEAKER

A powerful waterproof speaker to connect to CB radios and other communication devices for clearer audio reproduction. Features a 4" (102mm) Mylar speaker, right angle 3.5mm plug on a 1.2 metre cable & includes a mounting bracket.



SPECIFICATIONS	AS-3187
Power Handling	10WRMS
Power Max	15W
Impedance	8 Ohm
Freq Range	300Hz - 10kHz
Sensitivity	88dB/m
Dimensions	108(L) x 108(W) x 65(D)mm



	CAT.	Qty 1+
10WRMS	AS-3187	\$16.95

### MINI COMMUNICATIONS SPEAKER

For use with CB's and other communication devices, this mono speaker is small and can be mounted in any position for ease of use. It comes with a 3.5mm plug on a 2 metre cable and includes screws and bracket for mounting. It incorporates an 8 ohms round speaker and can handle 5 Watts Max.



SPECIFICATIONS	AS-3185
Frequency Response	100Hz- 15kHz.
Dimensions	98(W) x 80(H) x 57(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 5+
Each	AS-3185	\$22.95	\$20.45	\$17.95

### RECTANGULAR COMMUNICATIONS SPEAKER

For use with CB's and other communication devices, this mono speaker can be mounted in any position for enhanced listening of incoming transmissions. It comes with a 3.5mm plug on a 2 metre cable and includes screws and bracket for mounting. It incorporates an 8 ohms rectangular speaker and can handle 5 watts max.



SPECIFICATIONS	AS-3182
Frequency Response	100Hz- 15kHz
Dimensions	130(W) x 80(H) x 59(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Each	AS-3182	\$24.95	\$22.45	\$19.95

## ✓ WIRELESS AT WAR BOOK

### WIRELESS AT WAR BOOK - BY PETER JENSEN

The existence of electromagnetic radiation was first demonstrated in 1885 by Heinrich Hertz. After 1900 the potential advantages of wireless technology to the battlefield and for marine warfare became known, interested industrial organisations multiplied, keeping pace with the growth of the armies and navies. This book features 250 photos and diagrams and tracks the use of wireless technology in war from its inception all the way up to more recent conflicts in Afghanistan. Special reference is made to military communications used by the Australian Army, especially WWII and Vietnam. Whilst overseas references are made, this book is basically about radio technology and the Australian army. It was written by an Australian radio historian. A great read. Softcover 352 pages. 225 x 150mm.



	CAT.	Qty 1+
Wireless at War Book - by Peter Jensen	BM-2490	\$29.95

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.



### Smart Hardware Competition: - NICHOLAS LAURENT, SHOPS AT JAYCAR SYDNEY CITY

"My creation is a bushfire alerting automation system. It is built around Arduino UNO with weather station sensor with a smoke and flame sensors. This unit also has a rainwater tank level sensor. This powered by Solar with a battery backup. Send data via LoRaWan to my home assistant. This enables my home activate my fire shutters if conditions are met."



## VHF Transceivers

When the Italian/British inventor Marconi developed wireless communications at the beginning of the last century, he envisioned radio apparatus to be so complicated that special experts had to be trained to operate it. Indeed, this was an accepted dictum and "The Marconi School of Wireless" was established in many countries to train people. It was run in Australia by AWA and it was around for many, many years. As technology advanced, it was becoming obvious that you did not have to be a rocket scientist to operate a two-way type radio set. The American Motorola company (the inventor of the car radio) developed a two-way radio for the police. This innovation helped the police and soon other industries started clamouring for similar sets for their industries. Taxi-cabs were an early adopter of two-way radio. This improved the productivity of the taxi service enormously. By the mid-to-late 60's two-way radios were being adopted for taxis, the fire brigade, police and other commercial users. The frequency band was split up to two sections both VHF. There was VHF low band and VHF high band. It did not really

matter to the operator, however. Early marine two-way radio operated on the "short wave" or High Frequency Bands. It was complicated to use but had long range. You had to dial an actual frequency and the operation required some skills. The sets were quite expensive. Riding on the back of the CB radio boom in the mid-70's came 27MHz marine radio. It was relatively simple to use, but had limited range and was plagued with interference. A VHF marine band was gazetted earlier but popularity was limited because sets were fairly expensive. Along came Japanese production technology from the CB boom and the price of VHF Marine radio equipment plummeted. VHF Radios were refined, worked on FM which made them almost interference free, and used simple channel numbers rather than frequencies and only needed a minimum number of controls. And you did not need to be trained by the Marconi School of Wireless to operate them! See "TECH TALK" below for more info on VHF marine equipment.

### 3W VHF MARINE WATERPROOF FLOATING TRANSCEIVER

A VHF radio on a boat is a must have. You never know when your boat may be rendered inoperative by engine malfunction, a storm, rogue waves, or a monster from the deep. This transceiver will give you coverage of all international VHF marine channels so you can call for help when needed or communicate with other boats. This unit is fully submersible so if you find your boat has been capsized and you are stuck under the hull you know you'll be still be able to call for help. Includes a Li-ion rechargeable battery pack, AC adaptor, charging cradle and belt clip.

- IP67 rated
- 1/3W Switchable output power
- Backlit LCD
- Dual and triple watch function
- Channel scan function
- One-touch emergency channel 16
- Auto power saver mode
- Dimensions: 130(L) x 60(W) x 35(D)mm

It Floats.



**DON'T FORGET TO WASH THE UNIT IN FRESH WATER IF IT GOES FOR A SWIM!**



WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 10+
3W VHF Transceiver - Single	DC-1093	\$119.00	\$106.95	\$94.95
Spare Battery Pack	DC-1075	\$24.95	\$22.45	\$19.95

### 5W VHF MARINE RADIO TRANSCEIVER

You should never head out to sea without a VHF radio. If you plan on doing a bit of sailboat racing, the club rules will probably make a VHF radio compulsory on-board equipment. This powerful 5W hand-held transceiver gives you coverage of all international VHF marine channels. Though not completely submersible, the housing is compact and splash proof, specially designed to endure the usual rigours of boating. The antenna is detachable so units can be connected to a larger antenna mounted on a boat. Includes Li-ion rechargeable battery pack, AC adaptor, charging cradle, and belt clip.

- 1W/5W switchable output power
- Backlit LCD
- Dual and triple watch function
- Channel scan function
- One-touch emergency channel 16
- Auto power saver mode

Note: The USB charging socket requires 12V, standard 5V USB power supplies will not suit.



WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 10+
5W VHF Transceiver - Single	DC-1096	\$149.00	\$133.95	\$118.95
<b>ACCESSORIES TO SUIT</b>	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 5+</b>	<b>Qty 10+</b>
Cigarette Lighter Charger - 1.2m	DC-1099	\$17.95	\$15.95	\$14.35
Spare Battery Pack	DC-1066	\$24.95	\$22.35	\$19.70
Speaker Mic	DC-1062	\$24.95	\$22.35	\$19.70
Leather Pouch	DC-1067	\$12.95	\$11.65	\$10.35
VOX Headset & Microphone	DC-1056	\$14.95	\$13.35	\$11.70

## Tech Talk: VHF Marine Radio

The VHF Marine Radio band (156 - 174MHz) has been allocated internationally for the exclusive use of two-way radio equipment with fixed technical standards for marine use. Theoretically, you can buy a VHF marine transceiver in Country A and it will work in any other country. The reality, however, is slightly different. There are 56 channels allocated across the radio spectrum for Australia shown above, and the main emergency channel, channel 16, is the same all over the world! There is a secondary distress channel, channel 67 and it is also universal. When you operate a VHF Marine transceiver you monitor Ch. 16 (in case someone makes a distress call) and you can actually use that channel to call a colleague to contact them on the water. Once you have made contact, you immediately switch to another channel to keep Ch. 16 clear for possible emergency use. It is wise to confer with your colleague before going out to agree on the alternative channel, say Ch. 10. Then you don't have to broadcast what that channel is to discourage people from snooping in on your conversation. The non-emergency channel allocations may have local specific uses (such as harbour management, etc.) and this info appears in the manual that comes with the equipment when you buy it, if you buy it in Aus/ NZ. RANGE: For most amateur boating operations you should get plenty of range with VHF marine. A good fixed installation (not handheld units) should give you 25km line-of-sight. Conditions vary enormously at sea, so don't depend on this. Most of the time someone will hear you and you can relay messages if necessary. Volunteer coastal stations monitor Ch. 16 generally 24 hours a day. PRIVACY: Remember your first conversations can be heard by anyone on Ch. 16. Depending on how sophisticated your VHF unit is, you can configure it to have a private conversation with a colleague who has similarly equipment set on a non-emergency channel. One of the best features of VHF Marine use is that you do not have to be aware of actual frequencies. You can then think just in terms of channel numbers. Setting up when you go out. If you like, you can go straight to your nominated channel and bypass Ch. 16 as much as possible. You can arrange 'skeds' (i.e. schedules) to monitor, say Ch. 10, at 15 minute intervals, quarter to the hour, on the hour, a quarter past and half past for 2 - 3 minutes and then the rest of the time on Ch. 16. Happy boating!



# Power



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## MAINS USB CHARGERS

### 18W USB TYPE-C MAINS POWER ADAPTOR WITH POWER DELIVERY

USB-C with Power Delivery enables faster charging for more powerful devices. This PD wall charger is capable of communicating with compliant USB Type-C device and intelligently feed maximum power for quick and optimum charging. Suitable for charging latest Type-C phones and devices. USB PD will charge your smartphone up to 70% faster than standard 5W charging.

- Samsung, LG, Google Pixel, ASUS, HTC, Xiaomi USB-C enabled smartphones, iPhone 8/8plus/X\* (via original USB-C to lightning cable)

SPECIFICATIONS	MP-3410
Input	100-240V AC 50/60Hz
Output	5VDC @ 3A, 9VDC @ 2A, 12VDC @ 1.5A
Dimensions	43(W) x 27(H) x 74(D)mm

CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3410	\$29.95	\$26.95	\$23.95

### 45W USB TYPE-C MAINS POWER ADAPTOR WITH POWER DELIVERY

The days of different chargers for different devices are coming to an end! Power delivery in USB Type-C simplifies charging your portable devices. You can use this power adaptor to charge your laptop, or to charge your phone (compatible devices, of course). It automatically adapts to the required voltage (between 5 and 20VDC) to optimise charging time and efficiency for the connected item. Includes a 1m USB Type-C cable. Devices like the new iPhone which do not have a Type C connector but support Power Delivery can be charged using the original Type-C cable suited to that device.

- Nintendo switch, new MacBook, Google Chrome book, USB-C enabled smartphones & laptops, iPhone 8/ 8plus/ X (via original USB-C to lightning cable)
- Supports USB Power Delivery(PD) for fast charging & more power for large devices
- Overload, over current, short circuit protection

SPECIFICATIONS	MP-3412
Input	100-240VAC @ 50/60Hz
Output	5V/9V/12V/15VDC @ 3A, 20VDC @ 2.25A Max
Dimensions	41(W) x 56(H) x 102(D)mm (Excluding Plugs)

CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3412	\$59.95	\$53.95	\$47.95

### USB POWER ADAPTORS

A simple solution to your USB power needs in a conveniently small package. Choose between the 1.0A model to charge mobile phones, MP3 players, cameras and other small USB charged devices, or the 2.1A model that can also charge Tablets and iPads. They also feature worldwide voltage input making them great for travellers. Just connect your USB charging cable (not included) and away you go.

SPECIFICATIONS	BOTH MODELS
USB	Type A
Input Voltage	100-240VAC, 50/60Hz
Output	MP-3455: 1.0A, MP-3449: 2.1A
Dimensions	40(dia) x 27(L)mm

	COLOUR	CAT.	Qty 1+	Qty 5+	Qty 10+
1A	Black	MP-3455	\$14.95	\$13.35	\$11.70
2.1A	White	MP-3449	\$19.95	\$17.95	\$15.70

### DUAL USB WALL CHARGER WITH LED NIGHT LIGHT

This is a compact light weight multi-functional dual USB wall charger with LED night light, with both features functioning independent of each other. With a built in intelligent module the USB ports will deliver fastest possible charging speeds to smart phones, tablets and other USB devices.

- Light weight and compact, occupies single wall socket
- 3 light modes for night light function
- Fast charging dual USB outlets

SPECIFICATIONS	MP-3429
Input	100-240VAC, 50Hz
Output	5VDC 3A (Shared), Dual USB
Dimensions	55 (Dia.) X 49 (L)mm

CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3429	\$19.95	\$17.95	\$15.95

### 65W HIGH CAPACITY 4 PORT USB CHARGING STATION

This charging station covers all your USB charging requirements in one compact unit. A 45W Type-C port with power delivery keeps your compatible devices (laptops, many new smartphones etc) charging at rapid rates. A Quick Charge™ USB port provides rapid charging up to 18W for enabled devices (will work as a standard USB port for devices without QuickCharge technology), and two standard 2.4A USB charging outlets for fast charging of power-hungry portable devices. It has all your charging requirements taken care of in one convenient unit!

- Nintendo switch, new MacBook/ MacBook Pro(13"), Google Chrome book, USB-C enabled smartphones & laptops, iPhone 8/8plus/X (via original USB-C to Lightning cable)
- Supports USB Power Delivery(PD) and Quick Charge™ 3.0
- Short circuit and overload protection
- 1.2m SAA approved mains lead supplied

SPECIFICATIONS	MP-3418
Input	100-240V AC 50/60Hz, 1.5A Max.
Output	Quick Charge™ 3.0: DC 3.6-6V/ 3A, 6-9V/ 2A, 9-12V/ 1.5A, 18W Max. USB-C: 5/9/12/15VDC 3A, 20VDC 2.25A, 45W Max. USB-A x 2: 5VDC 2.4A (Each), 12W Max.
Weight	191g
Dimensions	33(W) x 81(H) x 82(D)mm

CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3418	\$69.95	\$62.95	\$55.95

## Tech Talk: USB Type-C Power Delivery

USB Type-C has made strides towards providing a one-interface solution for virtually all peripheral devices. It can provide HDMI, standard USB, and a host of adaptors are readily available, with exceptionally high speeds available.



One major area of advancement with USB Type-C which other standards never really managed to take on however, was handling the growing demands on USB for power.

The USB Type-C standard provides a solution to this problem with up to 100W of power, with an intelligent negotiation for requirements from connected devices. This means that Type-C can power your external hard drive, but also your laptop!

Major benefits of USB Type-C Power Delivery are:

- Faster charging and more power for larger devices.
- Bi-directional power flow. A peripheral can act as a power source providing power to the larger device.
- Optimised power management with each device negotiating only for the power it requires.
- Intelligent and flexible system level management of power
- Low power peripherals such as keyboards and headphones only request low amounts of power.

With new technology adopting USB Type-C, almost universally in many cases, it's a powerful step forward to a new standard. However many devices are yet to adopt USB Type-C. They still achieve the high speed USB 3.0 connection, but only standard power options are provided.

Fortunately, USB Type-C is easily adapted to older standards for full backward compatibility. As you will see from these pages, we have a range of adaptors which will allow you to charge your USB Type-C, as well as standard USB A devices. In time, USB Type-C may be the only connection you need. Until then, we've got you covered.



## MAINS USB CHARGERS (CONTINUED)

### 2 PORT USB POWER ADAPTOR

An ultra fast USB charger complete with 2 x USB sockets with 2.1A each, capable of charging virtually any mobile phone or USB device including all iPod® / iPhone® / iPad® models. Features worldwide voltage input making it great for travellers. Outputs 2100mA for each socket allowing it to charge 2 devices simultaneously. The perfect mobile device charging solution for your home and travel needs.



SPECIFICATIONS	MP-3459
Input Voltage	100-240VAC, 50/60Hz
Output	5VDC, 2.1A + 2.1A (4.2A total)
Dimensions	60(W) x 60(H) x 30(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
2 x 2.1A	MP-3459	\$24.95	\$22.35	\$19.70

### 3A USB POWER ADAPTOR WITH QUICKCHARGE™ 3.0

Charge your devices quickly and simply. This mains adaptor includes a standard 2.4A USB port as well as a port equipped with Qualcomm® Quick Charge™ 3.0 to recharge faster than ever before. The Quick Charge™ equipped port will still deliver up to 2.4A to a device not equipped with Quick Charge™ technology too.



SPECIFICATIONS	MP-3437
Input	100-240VAC @ 0.7A Max
USB Outputs	Quick Charge™ 3.0: 3.6-6.5V @ 3A; 6.5-9V @ 2A; 9-12V @ 1.5A, Standard: 5V @ 2.4A Max
Weight	82g
Dimensions	55(W) x 83(D) x 40(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	MP-3437	\$39.95	\$35.95	\$31.95

### 3A QUICK CHARGE™ 3.0 USB POWER ADAPTOR

Heading out in 30-minutes and zero charge on your phone is never good! But with embedded Quick Charge™ 3.0 technology you can charge up to 4-times faster than a standard charger! Just plug it into a spare mains outlet and it will provide you a single USB charging outlet. If your device doesn't support Quick Charge™ technology, it will still charge at up to 2.4A output.



SPECIFICATIONS	MP-3443
Input Voltage	100-240VAC 50/60Hz
Voltage Output	3.6-12VDC
Current Output	3.6-6.5VDC @ 3A, 6.5-9VDC @ 2A, 9-12VDC @ 1.5A
Dimensions	43(W) x 28(H) x 70(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
3.0A Quick Charge™	MP-3443	\$29.95	\$26.95	\$23.95

### 3A USB TYPE-C POWER ADAPTOR

Easily charge your Smartphone or tablet anywhere you go using this compact power adaptor. Plug into a mains outlet then connect your device using your USB Type-C power cable. Regardless of whether you connect a Smartphone, tablet or laptop, this adaptor will conveniently auto detect the device's ultimate charging requirements and charge accordingly. Built-in short circuit safeguard, overload protection and fully regulated output.



SPECIFICATIONS	MP-3445
Input Voltage	100-240VAC
Output Voltage	5VDC
Output Current	3A
Dimensions	57(L) x 54(W) x 28(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
3.0A Type-C	MP-3445	\$19.95	\$17.95	\$15.95

### 4 PORT USB POWER ADAPTOR

This slimline 4.8 amp mains power adaptor allows you to charge four USB devices from one power socket, conveniently freeing up other power sockets for use. Just plug the adaptor into a standard AC power socket and connect the charging cables of your devices to the four USB ports. Great for homes or offices that are short on power sockets and big on power hungry devices.



SPECIFICATIONS	MP-3446
Voltage Input	100-240VAC
Voltage Output	5VDC
Current Output	2.4A Each Port (Max.), 1.2A Each Port (Across 4 ports), 4.8A (Total)
Dimensions	105(H) x 40(W) x 35(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
4 Port	MP-3446	\$29.95	\$26.95	\$23.95

### DUAL USB TRAVEL POWER ADAPTOR WITH INTERCHANGEABLE PLUGS

Never get caught out without USB power for phone or tablet recharging ever again! This compact and lightweight adaptor has USA 2 PIN type plug inbuilt and 3 interchangeable international plugs covering over 150 countries worldwide. It provides 2 x USB charging outlets, up to 2.4A total, no matter what country you're in. Includes a handy carry bag to keep everything together. Works between 90 and 264VAC to suit all mains power sources.



- Dual USB charging outlets
- Built in US plug with UK, Euro, AU adaptors
- 2 X USB ports (2.4A Total)



SPECIFICATIONS	MP-3436
Input Voltage	90-264VAC
Output	5VDC @ 2.4A / 12W Max
Weight	91g (Total)
Dimensions	Main Unit: 32(W) x 37(H) x 34(D)mm (Plugs Folded) Australian Plug: 40(Dia.) x 35(D)mm European Plug: 35(W) x 30(H) x 55(D)mm British Plug: 50(W) x 42(H) x 40(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10
	MP-3436	\$24.95	\$22.45	\$19.95

## MAINS USB CHARGERS - WITH LEADS

### USB POWER ADAPTOR WITH MICRO B LEAD

A range of mains chargers with a USB output port to charge a variety of devices. Great as replacements or as a back-up. Each comes supplied with a 1m USB charge and sync lead to suit your specified device.



### FOR SMARTPHONES WITH USB 2.0 MICRO B - 1.0A MP-3544

	CAT.	Qty 1+	Qty 5+	Qty 10+
USB 2.0 Micro B - 1.0A	MP-3544	\$17.95	\$15.95	\$14.35

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.

## MAINS USB CHARGERS - WITH LEADS

### USB POWER ADAPTOR WITH MFI AND LIGHTNING LEAD

Never have charging compatibility issues with your Apple® device with Lightning® connector again. This 12W (2.4A) mains wall charger is licensed under the Apple® MFi program (made for iPod® / iPhone® / iPad®), so it is fully compatible with all Apple® devices with a Lightning® connector, even taking into consideration any future iOS® updates and future model releases. The main charger has a single USB output socket, and is supplied with a 1m Lightning® charge and sync lead which you can also use to sync your device to your home computer.



Made for  
iPod iPhone iPad

SPECIFICATIONS	MP-3547	1 YEAR WARRANTY
Input	110-240VAC, 50/60Hz	
Output	5VDC 2.4A	
Lead Length	1m	

	CAT.	Qty 1+	Qty 5+	Qty 10+
2.4A	MP-3547	\$34.95	\$31.45	\$27.90

## DESKTOP USB CHARGERS

### 5 PORT USB DESKTOP CHARGER

Charging and powering your USB devices has never been simpler. Connect this unit to mains power, and you have 5 charging ports! A maximum combined 8A charging current means you can quickly charge your Tablets or Smartphones, while leaving other devices charging too. The integrated stand allows it to lay flat, or stand upright on your desk.



1  
YEAR  
WARRANTY

SPECIFICATIONS	MP-3439
Voltage Input	100/240VAC
Voltage Output	5VDC
Current Output	2.4A Each Port (Max.) 1.6A Each Port (Across 5 Ports) 8A (Total)
Dimensions	117(W) x 28(H) x 77(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
5 Port	MP-3439	\$49.95	\$44.95	\$39.95

### 6 PORT USB POWERBOARD

Charges up to 6 USB devices at a time and features a smart charging IC, which identifies the USB device connected and delivers the most suitable current for that device. It is compatible with numerous digital devices such as the most popular brands of MP3/MP4 players, portable gaming devices, digital cameras, Tablets, and Smartphones, including iPod® / iPhone® / iPad® and Samsung®.

- Mains powered
- Power LED indicator

Note: Accessories not included.



1  
YEAR  
WARRANTY

SPECIFICATIONS	MS-4068
Current Output	6.8A (Max) 2 x 2.4A ports, 2 x 1A ports or 4 x 1.2A ports, 2 x 1A
Dimensions	190(L) x 40(W) x 32(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
6 Port	MS-4068	\$39.95	\$35.90	\$31.90

## Automatic Account:

For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.

## 5 PORT USB CHARGING STATION WITH STORAGE COMPARTMENT

This USB charging station allows you to position up to 5 tablets or smartphones side by side on top of the unit while charging. Place your cables inside the storage compartment while charging to avoid messy cables lying around. Multiple dividers can be easily positioned in one of the slots to accommodate for a variety of devices. It boasts a maximum power output of 2.4A per port, so even power hungry iPads® can be charged. Perfect for the office or typical household kitchen bench or bedside table. Includes 6 dividers and a 12VDC, 4A power supply.

1  
YEAR  
WARRANTY



SPECIFICATIONS	WC-7766
USB Current Output	2.4A Each Port (Max), 1.6A Each Port (Across 5 Ports) 8.2A (Total)
Power Output	41W
Power Supply	12VDC, 4A
Dimensions	165(L) x 120(W) x 62(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
5 Port	WC-7766	\$69.95	\$62.95	\$55.95

### FAST WIRELESS QI CHARGER 10W

Qi charging is an entirely wireless charging method, so there's no fumbling with cables. Using resonant inductance with an enabled device, you simply need to place your phone within a centimetre or two of the charging pad, for charging to automatically begin. Supporting Fast 10W and Standard 5W charging specifications, it's not always as fast as connected charging, but it's VERY convenient. Many new smartphone models now support Qi charging, such as Apple® iPhone® 8 / X, Samsung Galaxy Note 8, and so many more.

- Adaptive fast (10W) & standard (5W) wireless charging
- Suitable for iPhone® 8 / 8 Plus, iPhone® X, Samsung Galaxy Note 8 / S8 / S8 Plus, S7 / S7 Edge and Qi-Enabled Devices
- LED indicator

Note: Phone not included.



NEW  
2018



SPECIFICATIONS	MB-3667
Wireless Charging Standard	Qi
Input Voltage	9V 1.8A   5V 2.0A
Charging Frequency	110-205 KHZ
Charging Efficiency	≥75%
Charging Distance	4-10mm
Dual Charging Modes	Fast (10W) & Standard (5W)
Weight	53g
Dimensions	88(Dia) X 20(H) mm

	CAT.	Qty 1+	Qty 5+	Qty 10
Fast Wireless Qi Charger 10W	MB-3667	\$39.95	\$35.95	\$31.95

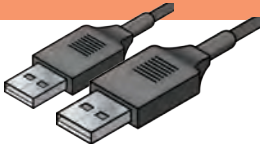
## USB Leads and Adaptors

We pride ourselves on a huge range of USB adaptors and leads, for the latest USB Type-C, conventional USB, and just about everything to adapt between the different standards. The plug drawings are not shown to scale, but shown to assist with plug identification to aid in selection. If you are unable to identify your plug or lead, you can bring it in to your local store for assistance.

### USB A

#### USB A

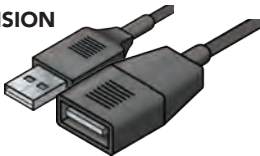
USB 2.0 / 3.0  
Plug to plug.



USB 2.0	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7707	\$5.95	\$5.25	\$4.75
1.8m	WC-7704	\$9.95	\$8.75	\$7.75
USB 3.0	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7770	\$12.95	\$11.45	\$9.95

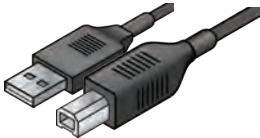
#### USB A - EXTENSION

USB 2.0



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7708	\$5.95	\$5.25	\$4.75
1.8m	WC-7702	\$9.95	\$8.75	\$7.75
3.0m	WC-7703	\$11.95	\$10.70	\$9.50

#### USB B



USB 2.0	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7705	\$5.95	\$5.25	\$4.75
1.8m	WC-7700	\$9.95	\$8.75	\$7.75
3.0m	WC-7701	\$11.95	\$10.70	\$9.50
5.0m	WC-7706	\$14.95	\$13.35	\$11.70
USB 3.0	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7772	\$12.95	\$11.45	\$9.95

#### USB MINI B

USB 2.0

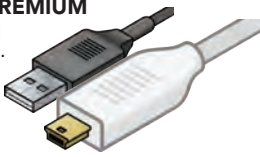
Suits Sony PSP®.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WC-7709	\$5.95	\$5.25	\$4.75
1.8m	WC-7710	\$9.95	\$8.75	\$7.75

#### USB MINI B - PREMIUM

High quality. Gold plated connectors.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7792	\$14.95	\$13.35	\$11.70

#### MICRO B

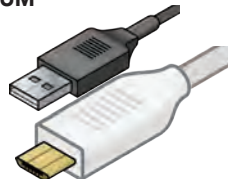
Great value.



	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7757	\$4.95	\$4.45	\$3.95
0.5m	WC-7723	\$5.95	\$5.25	\$4.75
1.8m	WC-7724	\$9.95	\$8.75	\$7.75

#### MICRO B - PREMIUM

High quality. Gold plated connectors.

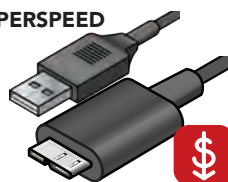


### CONCORD

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m	WC-7796	\$14.95	\$13.35	\$11.70

#### USB MICRO B SUPERSPEED

USB 3.0



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7774	\$12.95	\$11.45	\$9.95

#### LIGHTNING®

Charge or sync your Lightning® socket equipped iPhone® 5, iPad®, or other Apple® devices. Available in MFi and non-MFi options. MFi approval means you will get maximum compatibility and reliability as it is officially approved by Apple®.



Made for

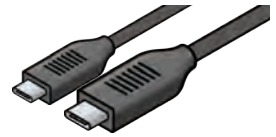
iPod iPhone iPad

NOT MFI	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7759	\$14.95	\$13.45	\$11.95
1m	WC-7728	\$14.95	\$13.35	\$11.70
MFI	CAT.	Qty 1+	Qty 3+	Qty 6+
1m	WC-7731	\$19.95	\$17.70	\$15.70
3m	WC-7733	\$34.95	\$31.45	\$27.95

### USB TYPE-C

#### TYPE-C

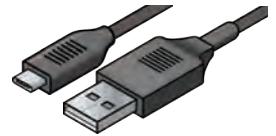
USB 2.0  
Plug to plug.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7920	\$24.95	\$22.45	\$19.95

#### USB A

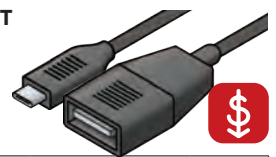
USB 2.0 / 3.0



USB 2.0	CAT.	Qty 1+	Qty 4+	Qty 10
150mm	WC-7758	\$12.95	\$11.45	\$9.95
1.8m	WC-7900	\$14.95	\$13.45	\$11.95
USB 3.0	CAT.	Qty 1+	Qty 4+	Qty 10
1.0m	WC-7910	\$19.95	\$17.95	\$15.95

#### USB A SOCKET

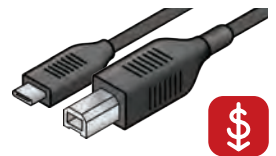
USB 2.0.



	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WC-7909	\$11.95	\$10.45	\$9.45

#### USB B

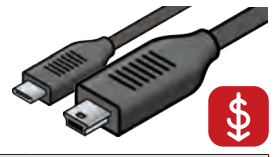
USB 2.0.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7906	\$14.95	\$13.45	\$11.95

#### MINI B

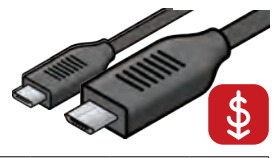
USB 2.0.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7904	\$14.95	\$13.45	\$11.95

#### MICRO B

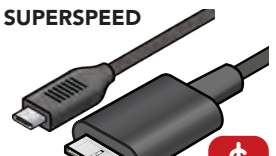
USB 3.0



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	WC-7902	\$14.95	\$13.45	\$11.95

#### USB MICRO B SUPERSPEED

USB 3.0



	CAT.	Qty 1+	Qty 4+	Qty 10+
1.0m	WC-7912	\$19.95	\$17.95	\$15.95

### Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

Catalogue Department - Jaycar Electronics:  
catalogue@jaycar.com

### 1 Year Warranty:

On all USB leads for peace of mind.



## USB POWER BOOSTERS

### 2.1A USB PORT POWER BOOSTER

A small device that plugs into the USB port of your computer to provide a faster charge to a Smartphone or Tablet. Without this device, a standard computer USB port will only slow charge a Smartphone and in many cases not charge a Tablet at all. The intelligent circuitry within this booster detects the device connected and automatically switches to the full speed charging mode up to 2.1A.

- Compatible with all Smartphones and Tablets
- Supports PC and Mac
- Input voltage: 5V
- Output current: Up to 2.1A
- Dimensions: 45(L) x 18(W) x 11(H)mm



CAT.	Qty 1+
XC-5700	\$5.95

### POWER BOOSTING LEAD FOR IPOD® / IPHONE® / IPAD®

Typically computer USB ports don't generate enough power to reliably charge some of your Apple® devices. Using this cable you can enhance the power of your iPhone® / iPad® / iPod® with a maximum charging current of 2.4A. Guaranteed compatibility with all iPod®, iPhone® or iPad® with Lightning® connectors.

- Current Output: up to 2.4A



Made for  
iPod iPhone iPad



	CAT.	Qty 1+	Qty 3+	Qty 6+
1m	WC-7741	\$29.95	\$26.95	\$23.70

### POWER BOOSTING USB A TO USB MICRO B LEAD

Computer USB ports really don't produce enough power to reliably charge your Android and Windows Smartphones or Tablets. This cable overcomes that problem, allowing you to charge your device up to 2.4A. Supports all Smartphones and Tablets with a USB Micro-B connection.

- Current Output: up to 2.4A



	CAT.	Qty 1+	Qty 3+	Qty 6+
1.8m	WC-7743	\$19.95	\$17.95	\$15.70

## CHARGING HUB

### 4-IN-1 MAGNETIC CHARGING HUB

An extremely convenient and attractive mains charger for your Smartphone or MP3 player. Comes with a variety of cables that magnetically connect to the charging hub to give more juice to your device.

- Sleek and compact, just sit it under your computer monitor and start charging!
- Over current/voltage protection

Note: iPhone® not included.



SPECIFICATIONS	MB-3651
Includes	30 pin iPhone® connector, Mini USB, Micro-B USB & Nokia connector
Output Current	800mA
Output Voltage	5V
Dimensions	80(Dia.) x 15(H)mm

	CAT.	Qty 1+
800mA	MB-3651	\$14.95

## USB SOCKET SAVER

### MICRO USB SOCKET SAVER LEADS - PAIR

Many of us on the Jaycar staff have found that using a USB socket (either standard or USB micro B, etc.) very frequently actually wears the connector out and it becomes unreliable. To reduce this problem, we have introduced a micro USB lead that should remain plugged into the USB device to save wear on the inlet socket. Yes, this means that you will have to put up with the inconvenience of a small lead sticking out of the device but it saves the product from becoming unusable. You can, of course lay the lead down with double-sided tape if you like to create a neater result.

- Micro USB
- 100mm long
- Sold as a pair

Product may vary from the one shown



	CAT.	Qty 1+	Qty 4+	Qty 10+
100mm	WC-7756	\$9.95	\$8.95	\$7.95

## MAINS ADAPTORS WITH USB PORTS

### 240V GPO WALL SOCKET WITH 4 X USB 3.15A OUTPUT

This hardwired USB adaptor will fit into a standard GPO wall plate base and give 4 USB power sockets with a total of 3.1 amps. Use it to power or charge pretty much anything that takes power from a USB socket.

- Instructions are included, however, all fixed wiring products must be installed by a licensed electrician!



	CAT.	Qty 1+	Qty 10+	Qty 50+
4 Ports	PS-4071	\$24.95	\$22.45	\$19.95

### CLIP OVER WALL PLATE WITH 2 USB PORTS

A clip over wall plate adaptor that can be easily fixed to an existing power outlet without opening and rewiring which adds 2 x USB ports. The 2 x USB outlets can charge and power your USB devices up to 3.1A in total. Using these two USB ports, you can turn any wall outlet into a mobile device charging station. Embedded with surge protection and switchable light sensor night light. It suits to widely used wall plates such as Clipsal®, HPM®, etc. Perfect for the kitchen, bathroom, or garage.



SPECIFICATIONS	MS-4009
Input Voltage	230-240VAC
Input Current	10A (Max)
Power Rating	2400W (Max)
USB Output Voltage	5VDC
USB Output Current	2.4A each port (Max) 3.1A shared (across 2 ports)
Dimensions	138(L) x 98(W) x 54(D)mm (excluding pins)

	CAT.	Qty 1+	Qty 4+	Qty 10+
	MS-4009	\$29.95	\$26.95	\$23.95

## UNIVERSAL IN-CAR CHARGERS

### CIGARETTE LIGHTER ADAPTER CABLE

Contains no circuitry and allows you to power 12V devices from your car cigarette lighter socket.

- Cable length 1.8m long
- Fused
- LED power indicator
- Supplied with 8 DC plugs: 2.35 x 0.75, 3.5 x 1.35, 4 x 1.7, 5.5 x 1.5, 5 x 2.1, 5.5 x 2.5, 2.5mm & 3.5mm. (OD first then ID)



		CAT.	Qty 1+	Qty 3+	Qty 6+
1.2m	1A	PP-1996	\$9.95	\$8.95	\$7.95

### UNIVERSAL GPS CHARGER WITH DUAL USB OUTPUT

This very handy universal GPS charger not only works as a replacement for an original GPS charger, but having two USB outputs and higher output power offers a bonus - allowing you to charge both your GPS and your mobile phone (or other USB device) at the same time! With 2.1A available from each USB port, it has enough power for even the latest and greatest big screen GPS models, whilst still having enough power left over to charge a second USB device. Supplied with 1.2m USB charging lead and 6 replaceable connectors to suit most GPS models.

- Suitable for: TomTom, TomTom XL, Navman, Garmin, Magellan, Navigon, Falk, Mio, etc
- Input: 12-24VDC
- Output: 5VDC, 2.1A max per USB port (4.2A total)
- Dimensions: 100(L) x 42(W) x 25(H)mm



		CAT.	Qty 1+	Qty 5+	Qty 10+
1.2m	4.2A total	MP-3676	\$29.95	\$26.90	\$23.70

### 3A CAR POWER ADAPTOR WITH USB OUTLET

Select a DC voltage and adaptor tip combination to power or charge a wide range of consumer electronics goods such as personal audio players, digital cameras, handheld gaming consoles, mobile phones, PDAs, PSP, etc. Many modern devices will also charge via the USB outlet.



SPECIFICATIONS	MP-3671
Input Voltage	12VDC
Output Voltage	3, 4.5, 5, 6, 7.5, 9.5, 12VDC
Output Current	3A
USB Output	5VDC, 1A
Power Indicator	LED
Dimensions	80(L) x 76.2(W) x 33(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
3A	MP-3671	\$29.95	\$26.90	\$23.70

## IN-CAR USB CHARGERS - WITH LEADS

### IN-CAR QUICK CHARGER FOR iPhone® / iPad®

A handy in-car charger suitable for charging Apple® brand gadgets such as iPhone® 5 and iPad®, which have the Lightning® connector socket. With 2.1A of charge current available, this in-car charger is capable of charging your Apple® device at full speed, ensuring you get as much charge as possible on your commute.

- Input: 12-24VDC
- Output: 5VDC 2.1A
- Lead length: 900mm with Lightning® connector
- Compatible with: iPhone® 5® & 5s®, iPad mini®, iPad® (4th generation), iPod Touch® (5th generation), iPod Nano® (7th generation)



	CAT.	Qty 1+	Qty 5+	Qty 10+
2.1A	MB-3668	\$14.95	\$13.35	\$11.70

### IN-CAR QUICK CHARGER FOR SMARTPHONES

Most Android® based Smartphones and Tablets are using the USB Micro-B socket for charging, and are also needing more current to charge at full speed. With 2.1A of charge current available, this in-car charger is your buddy in the glove box, ensuring you get a full charge into your Smartphone or Tablet on the drive to work. A saviour when you forget to charge overnight.

SPECIFICATIONS	MB-3669
Input	12-24VDC
Output	5VDC 2.1A
Lead Length	900mm with USB Micro-B connector



	CAT.	Qty 1+	Qty 5+	Qty 10+
2.1A Quickcharge	MB-3669	\$14.95	\$13.35	\$11.70

### 5.4A FIXED USB TYPE-C LEAD & CAR CHARGER

This high powered USB Type-C charger will power and recharge new laptops which feature the Type-C connector. Automatically regulated, delivering up to 5.4A, for quick recharging.

SPECIFICATIONS	MP-3684
Voltage Input	10-30VDC
Voltage Output	5VDC
Current Output	3A (Type-C), 2.4A (Type-A)
Lead Length	1m
Dimensions	70(D) x 28(Dia.)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
1 x USB Type-C	MP-3684	\$34.95	\$30.95	\$27.95

## IN-CAR USB CHARGERS

### 2.4A DUAL USB CAR CIGARETTE LIGHTER ADAPTOR

Simply plugs into your car's cigarette lighter socket to provide a USB charging source for your USB devices as you drive. With 2 x USB sockets and a total of 2.4A combined output power making it suitable for charging two smartphones, tablets or GPS at one time.

SPECIFICATIONS	MP-3663
Voltage Input	10-30VDC
Voltage Output	5VDC
Current Output	2.4A Each Port (Max), 1.2A Each Port (Across 2 Ports), 2.4A (Total)
Dimensions	60(L) x 30(D)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
2.4A 2 x USB	MP-3663	\$9.95	\$8.95	\$7.95

### 4.8A DUAL USB CAR CIGARETTE LIGHTER ADAPTOR

Plugs into your car's cigarette lighter socket to provide a USB charging source for your USB devices. The built-in smart charging IC identifies the device connected so that the optimum charging current is supplied to the Smartphone, Tablet, GPS and other USB devices.

SPECIFICATIONS	MP-3667
Voltage Input	10-30VDC
Voltage Output	5VDC
Current Output	2.4A Each Port (Max), 4.8A (Total)
Dimensions	75(L) x 28(D)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
4.8A	MP-3667	\$14.95	\$13.45	\$11.95

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!



## IN-CAR USB CHARGERS (CONTINUED)

### DUAL USB 4.8A SMART IC CAR CHARGER WITH LCD VOLTAGE DISPLAY

With two USB outlets capable of a combined 4.8A, you can charge your devices in minimal time. It also provides you constant voltage display on the screen so you can keep an eye on battery voltage. A host of safety features such as over-current protection mean you can plug and play. Connects directly into your cigarette lighter socket.

- Dual high powered USB
- LCD Screen Display the car battery voltage
- Over current protection and over voltage protection

SPECIFICATIONS	MP-3692
Output	2.4A x 2 Max, Total 4.8A
Input power	12-24V
Over Current Protection	5.5A
Over Voltage Protection	40V
Weight	0.4g
Dimensions	130(L) x 30(D) x 70(W) mm

CAT.	Qty 1+	Qty 5+	Qty 10
MP-3692	\$19.95	\$17.95	\$15.95



### 3A USB A & TYPE-C CAR CIGARETTE LIGHTER ADAPTOR

A USB Type-C plus USB Type-A power source for your car or truck. One port will output 5VDC up to 3A ideal for charging smartphones or tablets. Includes smart charging IC to detect optimum current for connected devices. Allows you to charge Smartphones, Tablets, MacBooks®, Google Chromebooks® or other devices that use a USB Type-C charging port. Simply plugs into your cigarette lighter socket and away you go.

SPECIFICATIONS	MP-3670	MP-3672
Voltage Input	10-30VDC	10-30VDC
Voltage Output	5VDC	5VDC
Current Output	3A	3A Type-C (Max), 2.4A Type-A (Max), 3A Shared (Max Across 2 Ports)
Dimensions	50(L) x 28(Dia.)mm	50(L) x 28(Dia.)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
1 x USB Type-C	MP-3670	\$19.95	\$17.95	\$15.95
1 x USB Type-C, 1 x USB Type-A	MP-3672	\$29.95	\$26.95	\$23.95



### 3A QUICK CHARGE™ 3.0 USB CAR CIGARETTE LIGHTER ADAPTOR

Ultra fast charging can be a life saver when you're in a hurry. With embedded Quick Charge™ 3.0 technology you can charge up to 4-times faster than a standard charger! It will work on car and truck systems (12-24V) and provide you a single USB charging outlet. If your device doesn't support Quick Charge™ technology, it will still charge at up to 2.4A output.

SPECIFICATIONS	MP-3680
Voltage Input	10-30VDC
Voltage Output	3.6-12VDC
Current Output	3.6-6.5VDC @ 3A, 6.5-9VDC @ 2A, 9-12VDC @ 1.5A
Dimensions	51(L) x 28(Dia.)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
3A Quick Charge™ 1 x USB	MP-3680	\$19.95	\$17.95	\$15.95



### 5.4A QUICK CHARGE™ 3.0 USB CAR CIGARETTE LIGHTER ADAPTOR

Provides an ultra-fast Quick Charge™ 3.0 port (up to 3A), as well as a standard 2.4A charging port for a combined total charge capability of 5.4A. Suitable for cars and trucks.

SPECIFICATIONS	MP-3682
Voltage Input	12-24VDC
Voltage Output	Qualcomm® Quick Charge™ 3.0 3.6-6.5V @ 3A / 6.5-9V @ 2A / 9-12V @ 1.5A & 1 x 5V @ 2.4A Max
Dimensions	70(L) x 28(Dia.)mm

CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3682	\$29.95	\$26.95	\$23.95



### 7.2A 4 PORT USB CAR CIGARETTE LIGHTER ADAPTOR

This cigarette lighter adaptor provides 4 USB charging ports, for up to 7.2A combined charging power - that's a lot! Tablets, smartphones, and other high demand devices can then charge at their desired rate, up to 2.4A per port. Works on 12 or 24V systems, so suitable for trucks and boats too.

SPECIFICATIONS	MP-3686
Input Voltage	10-30VDC
Current Output	2.4A (Each Port Max), 1.8A (Across all Ports), 7.2A (Total)
Protection	Overload & Short Circuit
Dimensions	80(L) x 45(W)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
4 x USB	MP-3686	\$24.95	\$22.45	\$19.95



### 9.6A 4-PORT USB CHARGER WITH BACKSEAT CHARGER

Ingenious! Provides two USB charging ports up-front, and two more charging ports for the back seats. So you can charge your phone or GPS while driving, and the kids can keep their entertainment powered in the back. Each port is rated at 2.4A for fast charging of tablets and power-hungry portable devices.

A 1.8m cable connects the backseat unit with the cigarette lighter front unit. Suitable for use in cars and trucks.

SPECIFICATIONS	MP-3690
Input	12-24VDC
Output	4 x 2.4A (9.6A total max.)
Cable	1.8m
Dimensions	53(W) x 79(D) x 18(H)mm (Excluding Cable and Mount)

	CAT.	Qty 1+	Qty 3+	Qty 6+
4 x USB	MP-3690	\$39.95	\$35.95	\$31.95



## IN-CAR POWER EXTENDERS

### CUP HOLDER POWER EXTENDER WITH PHONE CRADLE & DUAL USB SOCKETS

This clever charging system is designed to fit in a car cup holder to dock an iPhone® or iPod® in place preventing it from moving around while driving. It also neatly stores the charging cable away in the base to prevent clutter in the car's interior. Two cigarette lighter sockets are provided as well as a USB output for use with other electronic devices. Also has an LED indicator to state the level of your battery.

- 2 x 12VDC cigarette lighter sockets
- 2 x USB outputs
- iPhone®/iPod® holder
- Twist open bottom half
- Dimension: 100(H) x 70(Dia. base) x 92(Dia. top)mm

CAT.	Qty 1+	Qty 5+	Qty 10+
PS-2122	\$12.95	\$11.45	\$9.95



### CUP HOLDER POWER EXTENDER - DUAL USB SOCKETS 1.5A

Plugs into a single cigarette power socket and provides two cigarette power sockets and two USB power sockets, while sitting neatly in your vehicle's cup holder. The input lead is a 1.6m long curly cord, keeping tangled messy cords to a minimum, and the top features LED voltage indicators to show battery condition. The twin USB output sockets are very handy as pretty much everything charges from a USB port these days, meaning you can keep the cigarette power sockets free for other car accessories like the GPS.

SPECIFICATIONS	PS-2120
Input Voltage	12VDC
Output Voltage	12VDC
Maximum Current	10A (fused)
USB Outputs	5VDC 1.0A + 0.5A (1.5A total)
Dimensions	76(Dia.) x 65(H)mm

CAT.	Qty 1+	Qty 5+	Qty 10+
PS-2120	\$14.95	\$13.45	\$11.95





## IN-CAR POWER EXTENDERS (CONTINUED)

### CUP HOLDER POWER EXTENDER WITH DUAL USB PORTS 3.1A

A powerful device for cars and trucks. It works on any 12V and 24V system, while providing you with 2 x cigarette lighter sockets, and 2 x USB charging outlets (up to 3.1A combined). A built in 10A fuse keeps things safe, as does the built in over-temp and over-current protection. It conveniently slips into a spare cup holder, to securely stay in place in your vehicle. 600mm cable provided.

- Suitable for cars and trucks
- 3.1A max shared USB charging
- Dual cigarette lighter sockets with individual switches



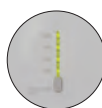
SPECIFICATIONS	PS-2118
Input	12-24VDC
USB Power Output	5VDC @ 3.1A (2.1A + 1A)
Operating Temperature	0°-65°C
Weight	204g
Lead Length	600mm
Dimensions	81mm(Dia.) x 97(H)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
	PS-2118	\$19.95	\$17.95	\$15.95

## POWER BANKS

### POWER BANK USB MAINS POWER ADAPTOR

Our 2-in-1 power bank combines a wall charger and portable power bank into one convenient device. Features a detachable plug for you to carry the slim power bank more conveniently. If this 2000mAh 2-in-1 Power Bank ever runs out of juice, you can simply plug the 240v plug directly into a power outlet. Features an LED indicator and pass-through charging technology, you can even charge the power bank and your device simultaneously.



LED power display



Detachable power connector

SPECIFICATIONS	MP-3438
Input	100-240VAC
Output	5VDC, 1A
Battery Capacity	2000mAh
USB Socket	Type-A
Dimensions	76(L) x 36(W) x 27(D)mm

	CAT.	Qty 1+
2,000mAh	MP-3438	\$14.95

### 2,600MAH METALLIC POWER BANKS

Ultra compact Aluminium case portable power bank that will effortlessly slip into your pocket or purse. One of the most powerful 'mini' chargers available that will add over one charge to most smartphones. Recharges in approximately 3 hours with a 1A USB power supply (Not included). Supplied with Micro B USB lead.

- Available in 3 colours



SPECIFICATIONS	ALL
Capacity	2,600mAh
Battery Type	Lithium-ion
Output	5VDC/1A
Charge Time	3 hours
Dimensions	96(L) x 22(W) x 22(D)mm

		CAT.	Qty 1+	Qty 10+	Qty 20+
2,600mAh	Silver	MB-3792	\$14.95	\$13.45	\$11.95
2,600mAh	Grey	MB-3793	\$14.95	\$13.45	\$11.95
2,600mAh	Rose Gold	MB-3794	\$14.95	\$13.45	\$11.95

### 4,000MAH ELEGANT POWERBANK WITH LED TORCH

This elegant oval shaped powerbank is made from aluminium and fits easily in a pocket or handbag. It houses 2 x 18650 Li-ion rechargeable batteries (the ones they put in the Tesla), and powers USB devices up to 2A at 4,000Ah. The built-in 130 Lumen 3 x LED torch has a high and low brightness setting, controlled by the flush fitting on/off switch. Silver in colour.

- Dimensions: 120(L) x 43(W) x 24(D)mm



SPECIFICATIONS	MB-3716
Capacity	4,000mAh
Battery Type	Lithium-ion
Output	5VDC/1A
Charge Time	3 hours
Dimensions	120(L) x 43(W) x 24(D)mm



	CAT.	Qty 1+	Qty 10	Qty 20
4,000mAh	MB-3716	\$24.95	\$22.45	\$19.95

### 5,000MAH POWER BANK

Compact and portable charger designed to charge your Smartphones and Tablets on the go. It comes with built-in USB and micro USB cables to suit most devices, and two built-in USB ports to charge other Smartphones via their original charging cable. Charge the power bank using the built-in USB cable from your PC or using a power adaptor (available separately). They have LED indicators to show you the battery status.



SPECIFICATIONS	MB-3724
Capacity	5,000mAh
Battery Type	Lithium polymer
Output	Port 1: 5VDC/2.1A / Port 2: 5VDC/1A
Charge Time	7 hours
Dimensions	108(L) x 64(W) x 16.5(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
5,000mAh	MB-3724	\$39.95	\$35.95	\$31.95

### 10,000MAH DUAL USB PORTABLE POWER BANKS

Extremely slim but boasting a huge 10,000mAh capacity of battery power. This extremely personable portable power bank has a chic carbon fibre finish and is right at home next to your smart phone, tablet or laptop. With Dual USB charging outlets, you can charge a couple of phones, tablets or other USB devices on the go together. Recharge from any other USB power source. Micro USB charging lead is included.

- Available in 2 colours



SPECIFICATIONS	MB-3795/3796
Capacity	10,000mAh
Battery Type	Lithium polymer
Output	Port 1: 5VDC/2.4A / Port 2: 5VDC/1A
Charge Time	7 hours
Dimensions	149(L) x 74(W) x 15(D)mm



		CAT.	Qty 1+	Qty 10+	Qty 20+
10,000mAh	Black	MB-3795	\$39.95	\$35.95	\$31.95
10,000mAh	White	MB-3796	\$39.95	\$35.95	\$31.95

### 6,600MAH LAPTOP POWER BANK

USB power banks and jump starters for your car are common, but now there's a similar option for your laptop! This power bank not only includes a multi-function USB port, it has 10 common laptop power plugs to keep you going. It can provide 12/16/19V outputs at up to 3.5A. An LCD keeps you informed of the battery status at all times. Recharged anytime via another available USB power source.



SPECIFICATIONS	MB-3719
Capacity	6,600mAh
Battery Type	Lithium-ion
Output	USB: 5VDC/2.1A / Laptop: 12/16/19VDC/3.5A
Charge Time	7 hours
Dimensions	138(L) x 49(W) x 20(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
6,600mAh Laptop Power Bank	MB-3719	\$69.95	\$62.95	\$55.95

## POWER BANKS (CONTINUED)

### 10,000MAH DUAL USB POWER BANK WITH QUICK CHARGE™ 3.0 & TYPE-C

The ultimate in modern power bank convenience. A huge 10,000mAh Li-Po battery supports powering and recharging your devices. One port is equipped with the latest Qualcomm Quick Charge™ 3.0 technology to charge your devices faster than ever before! Recharge the unit via USB Type-C or Micro USB (standard USB adaptors included).



SPECIFICATIONS	MB-3725
Capacity	10,000mAh
Battery Type	Lithium Polymer
Output	QC3.0 Port: 3.6-6.5V/3A, 6.5-9V/2A, 9-12V/1.5A USB Port: 5V/2.4A / USB Type C: 5V/3A
Charge Time	6 hours
Dimensions	151(L) x 75(W) x 15(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
10,000mAh	MB-3725	\$79.95	\$71.95	\$63.95

### 20,000MAH DUAL USB POWER BANK WITH QUICK CHARGE™ 3.0 & TYPE-C

Offering an enormous 20,000mAh battery capacity this is a one stop charging solution for all USB power needs. Ultra convenient and with a smooth metal finish this is a perfect addition to every backpack, handbag or briefcase. Equipped with two Qualcomm® Quick charge™ 3.0 USB A outlets and an additional USB C outlet this will charge average phones 75% faster and many times over! Recharge the unit via the Micro USB or USB Type-C port (works as input and output).



SPECIFICATIONS	MB-3797
Capacity	20,000mAh
Battery Type	Lithium-ion
Output	QC3.0 Port1: 3.6-6.5V/3A, 6.5-9V/2A, 9-12V/1.5A QC3.0 Port2: 3.6-6.5V/3A, 6.5-9V/2A, 9-12V/1.5A USB Type C: 5V/3A
Charge Time	10+ hours
Dimensions	177(L) x 81(W) x 23(D)mm

	CAT.	Qty 1+	Qty 10+	Qty 20+
20,000mAh Black	MB-3797	\$99.95	\$89.95	\$79.95

### 4,000MAH SOLAR RECHARGEABLE POWER BANK

This portable battery bank and solar charger uses a high-performance polymer li-ion battery with a capacity of 4,000mAh to suit your power hungry devices. Plug the Micro B USB end of the enclosed cable into your device to supply power and recharge. Alternatively turn the cable around to recharge the unit after use from an alternative power source. The LED indicator on the front of the charger tells you when you'll need to recharge the internal battery. To recharge either use the USB power adaptor (fully recharge in 4 hours) or harness the power of the sun (fully recharge in 25-27 hours depending on sun light conditions). The perfect power solution for when you're on the go and can't access an AC power outlet.



SPECIFICATIONS	MB-3723
Capacity	4,000mAh
Battery Type	Lithium-ion
Output	5VDC/2.1A
Charge Time	USB: 4 hours / Solar: 27 hours
Dimensions	155(L) x 70(W) x 15(H)mm

	CAT.	Qty 1+
4,000mAh	MB-3723	\$39.95

### 4,000MAH SOLAR RECHARGEABLE POWER BANK

Power banks are only good as long as they're already charged, but this one charges itself! A huge 4,000mAh internal battery provides you with loads of power for device recharging via the USB charging outlet, up to 2A. The unit can be recharged using the MicroUSB cable provided, or self-charge with its integrated solar panel. Solar charging is probably more considered the backup or emergency plan though, as it can take a few days (about 31 hours) to fully charge. However if you're leaving the unit on a dashboard or in a sunny window when not in use, it'll keep itself ready to go any time!



- Made of eco-friendly silicone rubber and ABS + PC material
- Suitable for charging iPhones, iPads, Android phones, GPS devices, cameras, etc
- Slim and light weight, charge through solar panel, USB output 2A



SPECIFICATIONS	MB-3790
Capacity	4,000mAh
Battery Type	Lithium Polymer
Output	5VDC/2A
Charge Time	USB: 3 hours / Solar: 31 hours
Dimensions	126(L) x 66(W) x 11(H)mm

	CAT.	Qty 1+	Qty 10+	Qty 20+
4,000mAh	MB-3790	\$49.95	\$44.95	\$39.95

### 8,000MAH WEATHERPROOF POWER BANK WITH SOLAR RECHARGING

It has a huge 8,000mAh Li-po battery inside, but that's just the beginning. The shock resistant case is rated at IP54 to protect against dust and rain, and also features a torch / SOS / caution light. A large solar panel provides emergency / powerless internal battery recharging when you have no other power available, and you can recharge your own devices using one of two USB outlets. It's lightweight and powerful, and even comes with a carabiner to clip to your hiking bag (or bug out gear!), so you'll never leave it behind.



- Weather, dust, shock resistant IP54 rated case.
- Overcharge, over-discharge, overvoltage, overcurrent, overpower, temperature, short-circuit, and anti-discharge protection
- Emergency solar charging

SPECIFICATIONS	MB-3791
Capacity	8,000mAh
Battery Type	Lithium Polymer
Output	Port 1: 5VDC/2.1A / Port 2: 5VDC/1A
Charge Time	USB: 5 hours / Solar: 62.5 hours
Dimensions	140(L) x 75(W) x 17(H)mm

	CAT.	Qty 1+	Qty 10+	Qty 20+
8,000mAh	MB-3791	\$69.95	\$62.95	\$55.95

### 42,000MAH PORTABLE POWER CENTRE

This is a fantastic new product for 2018. Firstly, it is a multipurpose power bank that can be charged from 240V mains or a solar panel via built-in MPPT charger. In other words, it can provide a campsite power completely independent from AC power charging, but provides AC and DC power itself!



#### This is what it does:

- 100W 240V Inverter (modified sine wave)
- 12VDC to 3 separate points. 9-12V at up to 15A. Ideal for a low voltage lighting system
- 3 x USB charging ports (Up to 6A shared)
- Bright LED camping light built-in
- Supplied with a solar panel charging lead (MC4 connectors), in-car charger adaptor, and mains charger.



SPECIFICATIONS	MB-3748
Battery	Lithium-ion
Capacity	42,000mAh
Output	1 x 240VAC @ 100W (Inverter), 1 x 9-12VDC @ 15A, 3 x USB A (6A Shared)
Solar Charge Time	>60 Hours
Dimensions	195(W) x 171(H) x 90(W)mm, 1.58kg

	CAT.	Qty 1+	Qty 10	Qty 20
42,000mAh Portable Power Centre	MB-3748	\$249.00	\$219.00	\$199.00

## MAINS LAPTOP POWER SUPPLIES

Buying an extra power supply saves the hassle of taking the power supply everywhere you take your laptop. Keep one at the office and one at home. The original power supply on your laptop may have failed, so get a replacement at a fraction of the cost of a genuine part. There's a model compatible with most laptops on the market. See our website for compatibility charts.

### 60W TYPE-C AUTOMATIC



MP-3340

### 65W - SLIMLINE SUITS ULTRABOOK™ - FIXED



MP-3321

### 90W - SLIMLINE - FIXED



MP-3332

**Manual Type:** Switch the output voltage to suit your laptop

**Automatic Type:** Models switch voltage automatically depending on the connector used.

Some models display the voltage on a LED or LCD display.

- All models feature short circuit and overload protection
- 1 Year warranty on all laptop supplies



### 90W - MANUAL



MP-3476

### 90W - AUTOMATIC



MP-3326

### 120W - SLIMLINE - FIXED



MP-3329

### 144W - MANUAL



MP-3471

See page 349 for Battery Bank with 19V Output for laptops

SPECIFICATIONS	MP-3340	MP-3321	MP-3476	MP-3326	MP-3332	MP-3329	MP-3471
Input Voltage	100 - 240VAC	100 - 240VAC	100 - 240VAC	100 - 240VAC	100 - 240VAC	100 - 240VAC	100 - 240VAC
Power Output	60W	65W	90W	90W	90W	120W	144W
Output Voltages	5/12/14/15/20VDC	19VDC	12/14/15/16/18/18.5/19/19.520/21/22VDC	15/16VDC, 19VDC	19VDC	19VDC	15/16, 18/19, 20, 22, 24VDC
Output Voltage Selection	Automatic	Fixed	Manual	Automatic	Fixed	Fixed	Manual
Output Current	3A	3.15A	12V @ 6A, 14-16V @ 5A, 18-20V @ 4.5A, 21-22V DC @ 4A	15/16V@4.7A, 19V@4.2A	4.4A	5.7A	8.5A, 8.0A, 7.5A, 6.5A, 6.0A
USB Output	5VDC @ 2A	5VDC @ 1A	-	5VDC @ 2.1A	5VDC @ 2.1A	5VDC @ 2.1A	-
Plugs	1	8	9	11	11	7	9
Dimension (L)(W)(H)	112 x 69 x 16mm	113 x 56 x 15mm	150 x 58 x 37mm	126 x 55 x 31mm	110 x 70 x 16mm	123 x 75 x 19mm	180 x 63 x 40mm

WATTAGE	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
60W	Auto	MP-3340	\$89.95	\$80.95	\$71.95
65W	Fixed - Slim	MP-3321	\$59.95	\$53.95	\$47.95
90W	Manual	MP-3476	\$74.95	\$67.50	\$59.95

WATTAGE	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
90W	Auto	MP-3326	\$84.95	\$76.45	\$67.95
90W	Fixed - Slim	MP-3332	\$89.95	\$80.95	\$71.95
120W	Fixed - Slim	MP-3329	\$109.00	\$97.95	\$86.95
144W	Manual	MP-3471	\$119.00	\$106.95	\$94.95

## IN-CAR LAPTOP POWER SUPPLIES

Keep your laptop or netbook charged on the road. Models to suit most of the mini computers on the market. Check website for compatibility.

### 90W AUTOMATIC MINI CAR LAPTOP POWER SUPPLY

This ultra-compact laptop charger achieves its small size by storing its electronics inside the lighter plug. Output voltage is automatically selected when you attach the plug that fits your computer. Will supply up to 90 watts output power.

SPECIFICATIONS	MP-3334
Input Voltage	12VDC
Output Voltage	14.5 - 20VDC
Output Current	3 - 4.7A
Power Output	90W
Dimensions	85(L) x 26(Dia)mm



WATTAGE	CAT.	Qty 1+	Qty 4+	Qty 10+
90W	MP-3334	\$59.95	\$53.95	\$47.90

### 150W - MANUAL

SPECIFICATIONS	MP-3472
Input Voltage	12VDC
Power Output	150W
Output Voltages	15, 16, 18, 19, 20, 22, 24VDC
Output Voltage Selection	Manual
Output Current	6A
Plugs	9
Dimensions	115(L) x 60(W) x 35(H)mm



WATTAGE	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
150W	Manual	MP-3472	\$74.95	\$67.50	\$59.95

## Tech Talk: Selecting Our Laptop Power Supplies

Looking at our large range of laptop power supplies, it might be a little overwhelming when trying to decide which is the best one to choose, but really it's quite simple. The easiest way to work out what you need it to look at the rating label on your original laptop power supply, and take note of the OUTPUT voltage and current (for example, 20V and 3.25A). Now multiply these together to get the POWER rating you need (in our example, 20 x 3.25 = 65 Watts). Then you just need to select a model that has an equal or higher power rating to your original power supply, in our given example this would be MP-3321 65W Universal Slimline Laptop Power Supply. Then it's just a matter of checking that the selected model is compatible with your brand of laptop, which can be done by looking on our website. But if all this is too confusing - never fear, just bring your laptop and the old power supply into your nearest store and our friendly staff will assist.



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!



## Uninterruptible Power Supplies (UPS) - AC:

Critical systems should ideally be connected to some form of backup power in the event of a blackout, power surge or brownout. A fault at the grid may drop the voltage at the mains, which could cause some systems to shutdown, reset, lose data or worse, resulting in thousands of dollars of damage (both material and immaterial). These line interactive units give you a good balance between real time system protection and power

redundancy when mains electricity is down or experiencing reliability issues. During mains voltage sags both units will deliver a steady voltage, keeping critical systems running properly. For a total power blackout the units can keep your systems running long enough to save important data or cleanly shutdown connected devices.

### Select Your Model: Ups Backup Time Test Results

	Maximum load			Back up mode		Backup time - typical		
	VA	W	Internal SLA Battery	Output Waveform	Transfer Time (mS)	Small PC (65W - 70W)	Medium PC and LCD Monitor (130 - 140W)	Large PC plus LCD Monitor (190 - 210W)
MP-5224	600	300	12V/7Ah	Modified Sine Wave	< 10	31 mins	11 mins	4.5 mins
MP-5205	650	390	12V/7Ah	Modified Sine Wave	< 10	25 mins	9 mins	5 mins
MP-5207	1500	900	12V/9Ah	Modified Sine Wave	< 10	94 mins	49 mins	31 mins

#### LINE INTERACTIVE UPS - 600VA

This self contained UPS is ideal for the home PC, point of sale machines, or workstations and peripherals. Features include intelligent CPU control, highly synchronous transfer (less than 6ms), automatic battery charging in UPS off mode, surge protection, voltage overload/low voltage protection and much more. There is a USB socket for connecting to your PC and software is provided to enable automated shut down, as well as RJ12 sockets for telephone protection.



SPECIFICATIONS	MP-5224
Rating	600VA 300W
SLA Battery	12V/7.0Ah battery
Supply Voltage / Output Voltage	100-240VAC / 100-240VAC
Backup Time	Up to 5 mins
Recharge Time	90% capacity after 8 hours
Output Waveform	Sine Wave (Mains), Modified Sine Wave (Battery)
Power Outlets	3 UPS, 3 Mains (all surge protected)
USB Output / RJ12 Input-Output	1 / 1
Software Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Linux
Dimensions	280(W) x 185(D) x 95(H)mm



#### LINE INTERACTIVE UPS WITH LCD - 650VA & 1500VA

Features an auto shutdown when no load is detected, audible alarms for low battery, self diagnosis on boot, and intelligent battery management. Both models feature an easy to read LCD which displays battery and load values as a percentage and input/output voltages. At the rear of the unit are 2 x RJ11 sockets for Telephone/Fax protection and a USB socket for connection to your PC for use with the power management software.



SPECIFICATIONS	BOTH MODELS
Usage	Home PC, SOHO
Type	Line interactive
Status Display	LCD
Backup Time Full Load Mins	10 - 20 minutes
Input Voltage	180 - 230VAC
Recharge Time	90% Capacity after 8 Hours
Communication	USB
Software Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Linux
SPECIFICATIONS	MP-5205 MP-5207
Short Circuit Protection	Yes No
Internal SLA battery	1 x 12V 7Ah 2 x 12V/8Ah
Dimensions	340 (L) x 95(W) x 165(H)mm 325(L) x 125(W) x 220(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
300W - 600VA	MP-5224	\$159.00	\$142.95	\$126.95

	CAT.	Qty 1+	Qty 3+	Qty 6+
360W - 650VA	MP-5205	\$149.00	\$133.95	\$118.95
900W - 1500VA	MP-5207	\$349.00	\$309.00	\$279.00

### ✓ RACK MOUNT PDU & PATCH PANELS

#### 6 WAY PDU WITH SURGE & OVERLOAD PROTECTION

Power up to six components in your rack setup. The board has 6 conventional 240V outlets and fits any standard 19" rack. It actually takes a little more than one rack unit, but mounts on 1U centres

- 1U rack space
- 10A output
- Overload protected
- Lead length: 1.6m
- Surge Protection
- Dimensions: 482(W) x 45(H) x 46(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
MS-4094	\$69.95	\$62.95	\$55.95



#### BALL BEARING SLIDING RACK SHELF

Ideal for mounting computer keyboards or other equipment that needs to be accessed easily. The slides have ball bearing runners for smooth operation & will take a load of 20kg.

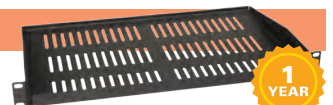
- Dimensions: 483(W) x 52(H) x 350(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
HB-5450	\$99.95	\$89.95	\$79.95

#### FIXED 19" RACK SHELVES

Supports up to 20kg. Solid steel construction, black powder coated finish.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1U - 483(W) x 45(H) x 305(D)mm	HB-5452	\$49.00	\$43.95	\$38.95
2U - 483(W) x 89(H) x 380(D)mm	HB-5454	\$69.00	\$61.95	\$54.95

#### RACK CABLE SUPPORTS

Takes the pain out of wiring and fault-finding rack cabinets. Your cables are kept organised and neat, with the support also providing strain relief.



	CAT.	Qty 1+	Qty 4+	Qty 10+
1U - 483(W) x 45(H) x 62(D)mm	HB-5430	\$24.95	\$22.35	\$19.70
2U 483(W) x 89(H) x 82(D)mm	HB-5432	\$29.95	\$26.90	\$23.70

#### DIN RAIL

Metal DIN rail, standard size for mounting power supplies, relays, terminals etc. 1 metre length.



#### ENCLOSURE MOUNTS FOR DIN RAIL

Makes mounting standard enclosures onto standard DIN rails easy. Supplied as a pair with self tapping screws.



	CAT.	Qty 1+	Qty 4+	Qty 10+
DIN Rail - 1 metre	HM-3092	\$12.95	\$11.35	\$10.35
Enclosure Mounts for DIN Rail	HM-3094	\$14.95	\$13.45	\$11.95

## "Plugpacks" & Small Scale Power Supplies:

When we first produced the Jaycar catalogue over 35 years ago, all power supplies were fitted with a 240V stepdown transformer. The transformers could be quite small - down to 3VA (3 watts approx.). They were relatively heavy (some would fall out of a power point) and all were fairly inefficient. Today, almost no plugpack or small scale power supplies have transformers, except AC-to-AC plugpack-type adaptors, the rest use what is called Switchmode technology. "Switchmode" type power supplies are in fact very clever. If you don't know how they work, look them up on Google, etc.. There is not enough room here to give you a primer. Not only are they lighter and far more efficient than transformer-type ("linear") power supplies, they are capable of providing far more DC power in a smaller size. I have a switchmode 'stick' welder at home that is about the size of a loaf of bread but will deliver up to 120A to weld very heavy steel objects indeed. The welder weighs about 5kg and replaced a

transformer model that weighed over 100kg. A switchmode power supply will also typically recognise the mains voltage that is being fed to them. You can, for example, take an AU/NZ 230/240V AC adaptor and use it on 110-115 volts overseas (with a plug pin adaptor) and not need to buy a special 115V unit. (Always check that your adaptor will do this of course).

All-in-all, switchmode technology is a clear winner. They are generally also more reliable and offer similar levels of dielectric isolation to transformer types.

**Gary Johnston.**



### Select Your Model: AC Adaptors - Up To 1.7 AMP

FIXED VOLTAGE MULTI VOLTAGE UNREGULATED DESKTOP STYLE

Voltage & Amps	400mA	500mA	550mA	600mA	800mA	1A	1.2A	1.25A	1.35A	1.5A	1.7A
3.0VDC						MP-3310				MP-3312	
4.5VDC						MP-3310				MP-3312	
5.0VDC						MP-3144 MP-3310				MP-3312	
6.0VDC					MP-3145	MP-3310				MP-3312	
7.5VDC					MP-3310					MP-3312	
9.0VDC		MP-3146	MP-3280		MP-3310	MP-3312				MP-3314 MP-3318	MP-3484
9.0VAC						MP-3027					
12VDC	MP-3147 MP-3282	MP-3011		MP-3310		MP-3312				MP-3486 MP-3314 MP-3318	
12VAC						MP-3026					
13.5VDC										MP-3318	
15VDC										MP-3318	
15VAC										MP-3059	
16VAC								MP-3021			
18VDC							MP-3318				
20VDC							MP-3318				
24VDC						MP-3318		MP-3494			
24VAC						MP-3032					
48VDC								MP-3256	MP-3249		

### AC Adaptors - From 2 AMP To 10 AMP

FIXED VOLTAGE MULTI VOLTAGE UNREGULATED DESKTOP STYLE

Voltage & Amps	2.0A	2.1A	2.2A	2.25A	2.5A	2.7A	3A	3.42A	5A	6.25A	8.5A	10A
3.0VDC		MP-3314		MP-3316	MP-3308							
4.5VDC		MP-3314		MP-3316								
5.0VDC		MP-3314		MP-3316	MP-3308		MP-3480					
6.0VDC		MP-3314	MP-3482	MP-3316	MP-3308							
7.5VDC		MP-3314		MP-3316								
9.0VDC				MP-3316	MP-3308		MP-3496					
9.0VAC												
12VDC				MP-3316	MP-3490 MP-3308				MP-3242 MP-3243 GH-1379 MP-3252		MP-3258	MP-3241
12VAC											MP-3043	
13.8VDC					MP-3308							
15VDC	MP-3492											
19VDC								MP-3246				
24VDC					MP-3254	MP-3248						
24VAC										MP-3045		

## SWITCHMODE AC ADAPTORS

They are extremely light and compact; enough to snugly and neatly fit side by side on a powerboard - no more wasted AC outlets! They incorporate high-efficiency circuitry, built in EMI filter, short circuit protection, over current protection and thermal shutdown capability.



Ideal for use with powerboards.

### 5 WATT - ULTRA-SLIM

- Input: 100-240VAC 50/60Hz
- Fit side-by-side on a powerboard
- Supplied with 7 plugs
- 1.7m lead
- Meets MEPS requirements



### 15 WATT - SLIM HIGH POWER

Regulated output voltage, small size and higher power output make these AC adaptors suitable for thousands of different applications.

- Input: 100-240VAC 50/60Hz
- Fit side-by-side on a powerboard
- Supplied with 7 plugs
- Meet MEPS requirements



VOLTAGE VDC	CURRENT AMPS	CAT.	Qty 1+	Qty 5+	Qty 10+
5	3.0	MP-3480	\$24.95	\$22.35	\$19.70
6	2.2	MP-3482	\$24.95	\$22.35	\$19.70
9	1.7	MP-3484	\$24.95	\$22.35	\$19.70
12	1.5	MP-3486	\$24.95	\$22.35	\$19.70

### 25 WATT - EXTRA HIGH POWER

- Input: 100-240VAC 50/60Hz
- Huge output power
- Supplied with 7 plugs
- Meet MEPS requirements



VOLTAGE VDC	CURRENT AMPS	CAT.	Qty 1+	Qty 5+	Qty 10+
5	1	MP-3144	\$17.95	\$15.95	\$14.35
6	0.8	MP-3145	\$17.95	\$15.95	\$14.35
9	0.5	MP-3146	\$17.95	\$15.95	\$14.35
12	0.4	MP-3147	\$17.95	\$15.95	\$14.35

VOLTAGE VDC	CURRENT AMPS	CAT.	Qty 1+	Qty 5+	Qty 10+
9	3.0	MP-3496	\$29.95	\$26.95	\$23.95
12	2.5	MP-3490	\$29.95	\$26.95	\$23.95
15	2.0	MP-3492	\$29.95	\$26.95	\$23.95
24	1.25	MP-3494	\$29.95	\$26.95	\$23.95

## MULTI - VOLTAGE

### SWITCHMODE PLUGPACKS WITH USB OUTLETS

These switchmode plugpack adaptors are slim in size, lightweight, and feature manually selectable variable voltage outputs. All are MEPS compliant and come supplied with 7 plugs and a USB output socket. (MP-3318 does not include USB socket)

Five models available:

7.2W 3-12VDC	CAT. MP-3310
12W 3-12VDC	CAT. MP-3312
18W 3-12VDC	CAT. MP-3314
27W 3-12VDC	CAT. MP-3316
25W 9-24VDC	CAT. MP-3318



SPECIFICATIONS	MP-3310	MP-3312	MP-3314	MP-3316	MP-3318
Input Voltage	100 - 240VAC	100 - 240VAC	100 - 240VAC	100 - 240VAC	100 - 240VAC
Output Voltage	3, 4.5, 5, 6, 7.5, 9, 12VDC	3, 4.5, 5, 6, 7.5, 9, 12VDC	3, 4.5, 5, 6, 7.5, 9, 12VDC	3, 4.5, 5, 6, 7.5, 9, 12VDC	9, 12, 13.5, 15VDC @ 1.5A, 18, 20VDC @ 1.2A, 24VDC @ 1A
Output Current	600mA (max)	1000mA (max)	1500mA (max)	2250mA (max)	1500mA (max)
Dimensions	69(L) x 39(W) x 31(H)mm	75(L) x 44(W) x 44(H)mm	82(L) x 52(W) x 45(H)mm	80(L) x 65(W) x 50(H)mm	96(L) x 50(W) x 30(H)mm

VOLTAGE VDC	CAT.	Qty 1+	Qty 5+	Qty 10+
3-12	MP-3310	\$19.95	\$17.95	\$15.95
3-12	MP-3312	\$24.95	\$22.35	\$19.70
3-12	MP-3314	\$29.95	\$26.95	\$23.95
3-12	MP-3316	\$34.95	\$31.45	\$27.90
9-24	MP-3318	\$34.95	\$31.45	\$27.90

## POWER SUPPLY ACCESSORIES

### IN-LINE LOW VOLTAGE SWITCH

Simply connect your plug pack adaptor into this in-line switch to provide quick and easy on/off control. Much easier than unplugging the connector or reaching for the power point when you want to switch your device on or off. 2.1mm DC plug & socket - rated at 24VDC at 2 amps.

Product may vary from the one shown.

CAT.	Qty 1+	Qty 10+	Qty 25+
SK-0998	\$7.95	\$6.95	\$6.25

### 7 PLUG DC WIRING KIT - 1.8M

Includes the same socket and 7 DC plugs as supplied with our range of switchmode AC plugpack adaptors.



CAT.	Qty 1+	Qty 3+	Qty 6+
PP-1980	\$8.95	\$8.05	\$7.15

SEE OUR WEBSITE OR CONTACT US FOR MORE TECHNICAL DATA, SAFETY APPROVALS ETC.

### THE 7 PLUGS SUPPLIED WITH SWITCHMODES ARE SHOWN HERE





## SWITCHMODE AC ADAPTORS (CONTINUED)

### DC OUTPUT - REGULATED 12VDC 500MA

- CCD Camera Power Supply
- Terminates to a 2.1mm ID / 5.5mm OD DC plug, centre positive.



VOLTAGE VDC	CURRENT AMPS	CAT.	Qty 1+	Qty 5+	Qty 10+
12	0.5	MP-3011	\$19.95	\$17.95	\$15.95

### SWITCHMODE MAINS ADAPTOR 3 - 13.8VDC 2.5A

Variable desktop supply with binding post and 7 DC plugs. 1.5m lead - interchangeable plugs.



SPECIFICATIONS	MP-3308
Output Voltage	3, 5, 6, 9, 12, 13.8VDC
Output Current	2.5A max
Dimensions	140(L) x 80(W) x 42(H)mm

VOLTAGE VDC	CURRENT AMPS	CAT.	Qty 1+	Qty 5+	Qty 10+
13.8	2.5	MP-3308	\$39.95	\$35.90	\$31.90

### 5 WATT - UNREGULATED ULTRA-SLIM

These super-slimline switchmode AC adaptors give an unregulated DC output, meaning that when loaded below their rated power, they will provide a slightly higher output voltage.

- Input: 100-240VAC, 50/60Hz
- Extra small, will fit side-by-side on a powerboard
- Direct replacement for old transformer type AC adaptors
- Supplied with 7 DC plugs
- Meets MEPS requirements



VOLTAGE VDC	CURRENT AMPS	CAT.	Qty 1+	Qty 5+	Qty 10+
9	0.55	MP-3280	\$15.95	\$13.95	\$12.45
12	0.4	MP-3282	\$15.95	\$14.35	\$12.75

For plugpacks with USB output see page 354

## TRANSFORMER TYPE AC ADAPTORS

Most adaptors are supplied with seven different plugs which suit most applications. All are Electricity Authority (SAA) approved.

### AC OUTPUT - NON REGULATED - SINGLE VOLTAGE

- Regulated AC output in a plugpack is not currently feasible



VOLTAGE (AC)	CURRENT (A)	CAT.	Qty 1+	Qty 5+	Qty 10+
9	1.0	MP-3027	\$26.95	\$23.95	\$21.45
12	1.0	MP-3026	\$29.95	\$26.95	\$23.95
15	1.5	MP-3059	\$29.95	\$26.95	\$23.95
24*	1.0	MP-3032	\$26.95	\$23.95	\$21.45

\*Stripped and tinned termination

### 16VAC 1.25 AMP ALARM SUPPLY

Designed for use with many house alarm panels. Supplied with three metres of cable for connection to alarm.

- Dimensions: 55(W) x 90(H) x 60(D)mm
- Terminated with bare ends



VOLTAGE (AC)	CURRENT (A)	CAT.	Qty 1+	Qty 5+	Qty 10+
16	1.25	MP-3021	\$26.95	\$23.95	\$21.45

## NBN POWER SUPPLIES

### NBN/UFB REPLACEMENT POWER SUPPLY 12V 2.5A

Plug-in replacement power supply for direct connection into your NBN connection box. No wiring required as it plugs straight into the mains power and connects to the 8 pin NBN connection box power port. Features overload and short circuit protection. Compliant with Australian and New Zealand Safety Standards.

- Input: 100 - 240VAC 50/60Hz
- Output: 12VDC 2.5A



CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3538	39.95	35.95	31.95

### NBN/UFB POWER CONNECTOR LEAD WITH BARE ENDS 300MM

This NBN replacement connector is a Molex 8 Pin plug pre-assembled with 2C 30cm cable with bare ends. Simply clip the connector of any standard 12V 2.5A plug pack and solder/heat shrink this connector on. This power supply can now be used to bypass your NBN battery back-up.



CAT.	Qty 1+	Qty 10+	Qty 50+
PP-2028	4.95	4.45	3.95

## DESKTOP STYLE AC ADAPTORS

These products meet the requirements of Energy Star, the European Commission Code of Conduct, and of course California's legislation, suppliers of electronic equipment requiring an external power supply can ship their products worldwide without needing to understand the complex new systems.



### 60W - 12V, 19VDC & 45W 24VDC

Versatile switchmode power supplies in a range of different configurations. All have high output currents and are low-profile for easy mounting.

- Each requires a separate IEC 240VAC lead - CAT PS-4106
- Output cable terminated to fixed 2.5mm DC plug except for MP-3243 which includes 5 output plugs



VOLTAGE(VDC)	CURRENT(A)	CAT.	Qty 1+	Qty 5+	Qty 10+
12	5	MP-3242	\$59.95	\$53.95	\$47.90
12 (5 plugs)	5	MP-3243	\$64.95	\$58.50	\$51.95
19	3.42	MP-3246	\$59.95	\$53.95	\$47.90
24	2.7	MP-3248	\$59.95	\$53.95	\$47.90

### 65W - 48VDC

48V power supply specifically designed for power over Ethernet applications.



SPECIFICATIONS	MP-3249
Voltage	90 - 264VAC
Output Voltage	48V @ 1.35A
Power Output	65W Max.
Over Voltage Protection	Shutdown latch mode
Over Current Protection	2 step controlled current source
Short Circuit Protection	Built-in
Efficiency	85% min. at full load



CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3249	\$59.95	\$53.95	\$47.90

For full range of replacement Laptop Power supplies see page 351 in our computer section.



## DESKTOP STYLE AC ADAPTORS

### 120W 12VDC 10A DESKTOP STYLE SWITCHMODE SUPPLY

High current switchmode desktop power supply. Suitable for various power requirements, including large surveillance systems to replace a number of smaller plugpacks. DC splitter cables available separately.

- Includes IEC power lead
- Output cable terminated to fixed 2.1mm DC plug

SPECIFICATIONS	MP-3241
Input Voltage	220-240VAC
Output Voltage	12VDC
Output Current	10A
Output Connector	2.1mm DC plug
Output Cable Length	1.2m
Dimensions	174(L) x 72(W) x 44(H)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
120W	MP-3241	\$84.95	\$76.45	\$67.95



### 60W - 12VDC 5A

- Switchmode



SPECIFICATIONS	GH-1379
Input	220 - 240VAC
Output	12VDC @ 5 amps
Dimensions	160(L) x 85(W) x 40(H)mm
Input Lead Lengths	1.2m
Termination	2 pin connector

	CAT.	Qty 1+	Qty 5+	Qty 10+
60W	GH-1379	\$34.95	\$31.45	\$27.95

## 240 - 115V STEPDOWN TRANSFORMERS

### ISOLATED STEPDOWN TRANSFORMERS

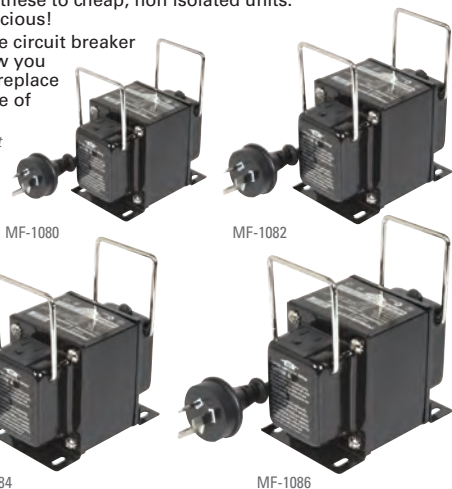
Quality fully-enclosed stepdown transformer with fold up metal carry handles, approved 3 wire power cord & US style 2 pin 110 - 115V socket.

- Electrically isolated between primary and secondary
- Protective earth carried through to output
- Useable with precision electric & electronic appliances.
- Compact, excellent, safe & robust construction - steel case.
- DO NOT compare these to cheap, non isolated units.

Your life is too precious!  
Includes a resettable circuit breaker instead of fuse. Now you are not tempted to replace the fuse with a piece of coathanger wire.

*Note: Due to heavy weight (11kgs) please check for freight costs.*

*These devices are not switchmode, they are AC to AC.*



SPECIFICATIONS	RATING	DIMENSIONS	WEIGHT
MF-1080	120VA (watts) 1.0 amp	125(W) x 74(D) x 90(H)mm	2.4kg
MF-1082	250VA (watts) 2.2 amps	133(W) x 81(D) x 98(H)mm	3.2kg
MF-1084	500VA (watts) 4.2 amps	158(W) x 100(D) x 120(H)mm	6kg
MF-1086	1000VA 8.6 amp	195(L) x 120(W) x 140(H)mm	11kg

	CAT.	Qty 1+	Qty 2+	Qty 4+
240 - 115V 120W	MF-1080	\$119.00	\$106.95	\$94.95
240 - 115V 250W	MF-1082	\$169.00	\$151.95	\$134.95
240 - 115V 500W	MF-1084	\$289.00	\$259.00	\$229.00
240 - 115V 1000W	MF-1086	\$399.00	\$359.00	\$319.00

## Tech Talk: Stepdown Transformers

A word on isolation. This means that:

The primary (240V) & secondary (115V) are totally electrically isolated (Dielectric isolation). This is the safest way of making a mains voltage conversion. We recommend this type of transformer whenever the application is medical or medically related or where the secondary equipment is to be operated in or near water or high moisture environments. Note the 240V earth is carried through to the 115V socket earth. As a further safety measure we now supply the ISOLATED units with resettable circuit breakers.

### 50 WATT - 240VAC TO 115VAC

Includes overheat protection. If the unit gets too hot, the thermal fuse will open, then close after unit cools down, restoring operation. Two pin US socket on unit for 110V appliance and cord plug for 240V power.

- This is not dielectrically isolated. (Auto transformer type)
- Not for use in wet areas



	CAT.	Qty 1+	Qty 2+	Qty 4+
50W	MF-1091	\$49.95	\$44.90	\$39.90

## VARIAC

### 0-260VAC VARIABLE LABORATORY AUTO TRANSFORMER - 500VA

The variable autotransformer (Variac) is the trade name of a popular brand) is one of the most useful and efficient devices ever invented for the control of AC voltage and of voltage-dependent parameters such as current, power, temperature, light intensity, motor speed etc. It enables the AC input to a mains powered appliance to be easily varied from 0 to full line voltage (or greater).

Encased in heavy-duty steel housing it also features on/off switch, output-voltage meter, mains-supply lead and standard 3-pin power output. A must for testing appliance performance under real (simulated) mains fluctuations.

- Now supplied with slow blow fuses for extra reliability

*Note: These devices are not switchmode, they are AC to AC.*

**NOT DIELECTRICALLY ISOLATED**



SPECIFICATIONS	MP-3080
Rated power handling	500 VA (fused)
Input Voltage	240 VAC @ 50Hz
Output Voltage	0 ~ 260 VAC @ 50Hz
Dimensions	165(D) x 120(W) x 160(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
240VAC 500VA	MP-3080	\$199.00	\$178.95	\$158.95



## GARDEN LIGHTING TRANSFORMERS

Designed to power 12V and 24V garden lights from mains power. All output voltages are AC, not DC.

*Note: These devices are not switchmode, they are AC to AC.*

### 240V TO 12VAC 105 WATT - INDOOR

It will power 2 x 50W halogen globes or 5 x 20 watt. Ideal for 5 x 20W pathway lights, for example. Transformer must be used inside.

- 135(L) x 83(W) x 70(H)mm
- Output is via screw terminals
- 4 holes for easy screw mounting

CAT. MP-3043

### 240V TO 24VAC 150 WATT - INDOOR

All globes must be 24V rated

- Output 6.25 amps CAT. MP-3045



	APPROVAL NUMBER	CAT.	Qty 1+	Qty 5+	Qty 10+
12VAC 105W	N15653	MP-3043	\$39.95	\$35.90	\$31.90
24VAC 150W	N16803	MP-3045	\$59.95	\$53.95	\$47.90

## ENCLOSED INDUSTRIAL STANDARD SWITCHMODE POWER SUPPLIES

A range of highly efficient, fixed voltage, no load low power (<0.2-0.75W) consumption enclosed power supplies for a wide range of industrial applications. They are more compact and more efficient than previous generation models. The 30mm low profile design allows them to be built into 1U rack enclosures, while the metallic mesh case enhances the heat dissipation. They are capable of operating at altitudes up to 5000 metres. Not only do they satisfy every kind of industrial related application but also can be utilised for household appliances thus accounting for a broader coverage across diverse industries. See our website for full datasheets on each model.

- Full range 85~264VAC input
- Withstand 300VAC surge input for 5 seconds
- High efficiency, long life & high reliability
- 100% full load burn-in test
- Extremely low no load power consumption
- Protection: Short, overload & overvoltage
- Power on LED indicator
- 5G anti-vibration capability
- Complies with international safety standards
- Operates from -30°C to 70°C under air convection without a fan
- Backed by 3 year warranty



WARRANTY

\* MP-3294: Overtemperature protection, built in DC fan, active PFC (Power Factor Correction)

SPECIFICATIONS	MP-3285	MP-3286	MP-3287	MP-3288	MP-3289	MP-3290	MP-3291	MP-3292	MP-3294*
Model No.	LRS-35-12	LRS-35-24	LRS-75-12	LRS-75-24	LRS-75-5	LRS-100-12	LRS-150F-12	LRS-150F-24	RSP-320-12
Output Voltage	12VDC	24VDC	12VDC	24VDC	5VDC	12VDC	12VDC	24VDC	12VDC
Tolerance	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 2.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%
Ripple & Noise	120mV	150mV	120mV	150mV	100mV	120mV	150mV	200mV	150mV
Rated Current	3A	1.5A	6A	3.2A	14A	8.5A	12.5A	6.5A	26.7A
Efficiency	86%	88%	89%	90%	86.50%	88%	87.50%	89%	88%
Input Frequency	47-63Hz	47-63Hz	47-63Hz	47-63Hz	47-63Hz	47-63Hz	47-63Hz	47-63Hz	47-63Hz
Cold Start Inrush Current	45A	45A	50A	50A	50A	50A	60A	60A	40A
Weight	230g	230g	300g	300g	300g	340g	480g	480g	900g
Dimensions L x W x H	98 x 82 x 30mm		99 x 97 x 30 mm			129 x 97 x 30mm	159 x 97 x 30mm		215 x 115 x 30mm

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
35W	12V	3A	MP-3285	\$29.95	\$26.95	\$23.95
35W	24V	1.5A	MP-3286	\$29.95	\$26.95	\$23.95
75W	12V	6A	MP-3287	\$44.95	\$39.95	\$35.95
75W	24V	3.2A	MP-3288	\$44.95	\$40.45	\$35.95
75W	5V	14A	MP-3289	\$44.95	\$40.45	\$35.95

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
100W	12V	8.5A	MP-3290	\$49.95	\$44.95	\$39.95
150W	12V	12.5A	MP-3291	\$69.95	\$62.95	\$55.95
150W	24V	6.5A	MP-3292	\$69.95	\$62.95	\$55.95
320W	12V	26.7A	MP-3294	\$169.00	\$151.95	\$134.95

## ENCLOSED POWER SUPPLIES

A range of mini enclosed switchmode power supplies with single (RS) or dual (RD) outputs.

- Miniature size, non-PFC
- 5G vibration, High operating temperature up to 70°C
- 300VAC input surge
- Suitable for critical applications
- Dual outputs available with the RD series



WARRANTY

### SINGLE OUTPUT POWER SUPPLIES - RS SERIES

SPECIFICATIONS	MP-3295	MP-3296	MP-3297	MP-3298
Model No.	RS-15-5	RS-15-12	RS-25-12	RS-25-24
Output Voltage	5VDC	12VDC	12VDC	24VDC
Tolerance	+/- 2.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%
Ripple & Noise	80mV	120mV	120mV	120mV
Rated Current	3A	1.3A	2.1A	1.1A
Efficiency	77%	81%	81.50%	86%
Input Frequency	47-63Hz	47-63Hz	47-63Hz	47-63Hz
Cold Start Inrush Current	65A	65A	30A	30A
Weight	130g	130g	200g	200g
Dimensions L x W x H	62.5 x 51 x 28mm		78 x 51 x 28mm	

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
15W	5V	3A	MP-3295	\$19.95	\$17.95	\$15.95
15W	12V	1.3A	MP-3296	\$19.95	\$17.95	\$15.95
25W	12V	2.1A	MP-3297	\$24.95	\$22.45	\$19.95
25W	24V	1.1A	MP-3298	\$24.95	\$22.45	\$19.95

### DUAL OUTPUT POWER SUPPLIES - RD SERIES

SPECIFICATIONS	MP-3299	MP-3300
Model No.	RD-65A	RD-125B
Output Voltage CH1	5VDC	5VDC
Output Current CH1	6.0A	4.6A
Voltage Tolerance CH1	+/- 2.0%	+/- 5.0%
Ripple & Noise CH1	80mV	80mV
Output Voltage CH2	12VDC	24VDC
Output Current CH2	3.0A	4.6A
Voltage Tolerance CH2	+/- 6.0%	+/- 7.0%
Ripple & Noise CH2	120mV	120mV
Efficiency	79%	85%
Input Frequency	47-63Hz	47-63Hz
Cold Start Inrush Current	40A	40A
Weight	440g	700g
Dimensions L x W x H	129 x 98 x 38mm	199 x 98 x 38mm



WARRANTY

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
65W	5V/12V	6A/3A	MP-3299	\$49.95	\$44.95	\$39.95
125W	5V/24V	4.6A/4.6A	MP-3300	\$79.95	\$71.95	\$63.95

## MINI POWER SUPPLIES

The IRM Series is a miniature encapsulated AC/DC power supply. This on board module features compact size and extremely low (<0.1W) no load power consumption at standby mode. This allows designers to easily conform to the requirements of ErP norm (Energy-related Products) and EISA. The 94V-0 flame retardant plastic case and fully-potted silicone enhance the heat dissipation and meet anti-vibration demand up to 5G. The new series complies with UL/CUL/TUV/CB/CE certificates for safety. Suitable applications include electronic instruments, hand held electronics, factory automation and electrical or mechanical equipment. Our range comes with screw terminals.

- Universal AC input / Full range
- Compact size
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Isolation Class II
- No load power consumption <0.1W
- Pass LPS
- 100% full load burn-on test
- High reliability



WARRANTY

SPECIFICATIONS	MP-3301	MP-3302
Model No.	IRM-30-5ST	IRM-30-12ST
Output Voltage	5VDC	12VDC
Tolerance	+/- 2.5%	+/- 2.5%
Ripple & Noise	120mV	150mV
Output Current	6A	2.5A
Efficiency	83%	88%
Input Voltage	85 ~ 264VAC	85 ~ 264VAC
Input Frequency	47-440Hz	47-440Hz
Cold Start Inrush Current	45A	45A
Weight	120g	120g
Dimensions L x W x H	91 x 39.5 x 28.5mm	91 x 39.5 x 28.5mm

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
30W	5V	6A	MP-3301	\$39.95	\$35.95	\$32.95
30W	12V	2.5A	MP-3302	\$39.95	\$35.95	\$31.95

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## DIN RAIL POWER SUPPLIES

### 45 WATT INDUSTRIAL DIN RAIL SWITCHMODE POWER SUPPLIES

These compact and light weight industrial power supplies features full temperature, voltage and current overload protection. They have a built-in EMI filter, a power on LED and operate from 85 ~ 264VAC to provide either 12 Volts DC @ 3.5A or 24 Volts DC @ 2.0Amps. Input and output connections are via a 7.5mm pitch terminal block.



SPECIFICATIONS	MP-3190	MP-3192
Model No.	DR-4512	DR-4524
Input Voltage	85-264VAC, 120-370VDC	85-264VAC, 120-370VDC
Input Frequency	47-63Hz	47-63Hz
Output Voltage	12VDC	24VDC
Line Regulation	1% +/-	1% +/-
Ripple & Noise	200mV	480mV
Output Current	3.5A	2A
Efficiency	77%	80%
Cold Start Inrush Current	56A @ 230VAC	56 @ 230VAC
Dimensions L x W x H	93 x 78 x 67mm	93 x 78 x 67mm



WATTAGE	VOLTAGE	CAT.	Qty 1+	Qty 3+	Qty 6+
45W	12V	MP-3190	\$49.95	\$44.95	\$39.95
45W	24V	MP-3192	\$49.95	\$44.95	\$39.95

### DIN RAIL POWER SUPPLIES

Mean Well HDR DIN Rail power supplies are available in 15W, 30W, or 60W and feature an ultra-slim, step shape plastic housing. The HDR family specially adopts the European Union standard DIN EN43880 and slim design with a height of 90mm and the width are only 15U to 3SU (17.5mm/35mm/52.5mm). They also feature efficiencies up to 91%, adjustable ( $\pm 10\%$ ) DC output voltage, and a working temperature range of -30°C to +70°C. Typical applications include building automation, household control system, industrial control system, factory automation and electro-mechanical apparatus.

- Ultra slim design with 17.5mm(1SU) / 35mm(2SU) / 52.5mm(3SU) width
- Universal input 85~264VAC
- No load power consumption < 0.3W
- Isolation class II
- Pass LPS (limited power source)
- DC output voltage adjustable
- Short circuit / overload / over voltage protections
- Cooling by free air convection (working temperature: -30~+70°C)
- DIN rail TS-35/7.5 or 15 mountable
- LED indicator for power on



SPECIFICATIONS	MP-3155	MP-3156	MP-3157	MP-3158	MP-3159
Model No.	HDR-15-12	HDR-30-12	HDR-30-24	HDR-60-12	HDR-60-24
Output Voltage	12VDC Adjustable	12VDC Adjustable	24VDC Adjustable	12VDC Adjustable	24VDC Adjustable
Ripple & Noise	120mV	120mV	150mV	120mV	150mV
Output Current	1.25A	2.0A	1.5A	4.5A	2.5A
Efficiency	85%	88%	89%	88%	90%
Input Voltage	85 ~ 264VAC, 120 ~ 370VDC				
Input Frequency	47 ~ 63Hz				
Cold Start Inrush Current	45A @ 230VAC			60A @ 230VAC	
DIN Rail Compatability	TS35/7.5 or 15 mountable				
Dimensions L x W x D	90 x 17.5 x 54.5mm	90 x 35 x 54.5mm		90 x 52.5 x 54.5mm	

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
15W	12V	1.25A	MP-3155	\$39.95	\$35.95	\$31.95
30W	12V	2A	MP-3156	\$49.95	\$44.95	\$39.95
30W	24V	1.5A	MP-3157	\$49.95	\$44.95	\$39.95
60W	12V	4.5A	MP-3158	\$69.95	\$62.95	\$55.95
60W	24V	2.5A	MP-3159	\$69.95	\$62.95	\$55.95

### 120 WATT INDUSTRIAL DIN RAIL SWITCHMODE POWER SUPPLIES

- Input voltage 110/240VAC (switch)



SPECIFICATIONS	MP-3195	MP-3197
Model No.	DR-120-12	DR-120-48
Input Frequency	47-63Hz	47-63Hz
Output Voltage	12VDC	48VDC
Line Regulation	2% +/-	1% +/-
Ripple & Noise	80mV	100mV
Output Current	10A	2.5A
Efficiency	80%	85%
Cold Start Inrush Current	40A @ 230V	40A @ 230V
Dimensions	65 x 125 x 100mm	



WATTAGE	VOLTAGE	CAT.	Qty 1+	Qty 3+	Qty 6+
120W	12V	MP-3195	\$99.95	\$89.95	\$79.95
120W	48V	MP-3197	\$99.95	\$89.95	\$79.95

### DESKTOP POWER SUPPLIES

Mean Well GST series Power Adaptors are highly reliable desktop style single output green adapters complying with the latest energy efficiency regulation (EISA 2007/DoE Level VI). With a low no load power consumption (less than 0.075W) and an average operating efficiency up to 90% these are far superior to any other power supply in the market. They are made of 94V-0 flame retardant plastic case and are certified for various international safety regulations. This range is ideal for use with various types of consumer electronic devices, telecommunication devices, office facilities, industrial equipment, and various kinds of apparatus or systems requiring conformity to the latest energy related regulations.

- 90~264VAC input
- No load power consumption < 0.075W
- 94V-0 flame retardant fully enclosed plastic case
- Complete protection functions:
  - Short circuit/overload/over voltage/over temperature (GST60A only)
  - 3 pole AC inlet IEC320-C14
- Energy efficiency level VI
- Comply with up to date global energy efficiency regulations
- EISA 2007/DoE, NRCAN, AU/NZ MEPS, EU ErP and CoC Version 5
- Class I power (with earth pin)
- Pass LPS
- LED indicator for power on

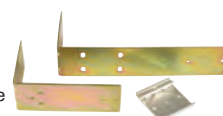


SPECIFICATIONS	MP-3252	MP-3254	MP-3256	MP-3258
Model No.	GST60A12-P1J	GST60A24-P1J	GST60A48-P1J	GST120A12-R7B
Input Voltage	90 ~ 254VAC	90 ~ 264VAC	90 ~ 264VAC	90 ~ 264VAC
Output Voltage	12VDC	24VDC	48VDC	12VDC
Output Current	5A	2.5A	1.25A	8.5A
Tolerance	+/- 3.0%	+/- 3.0%	+/- 2.5%	+/- 5.0%
Ripple & Noise	150mV	180mV	240mV	120mV
Efficiency	89.50%	90.50%	92%	88.50%
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Inrush Current (max)	65A	65A	65A	70A
Output plug type	2.1mm DC (P1J)			DIN 4 Pin with lock type (R7B)
Weight	305g	305g	305g	620g
Dimensions L x W x D	125 x 50 x 31.5mm		167 x 67 x 35mm	

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 5+	Qty 10+
60W	12V	5A	MP-3252	\$49.95	\$44.95	\$39.95
60W	24V	2.5A	MP-3254	\$49.95	\$44.95	\$39.95
60W	48V	1.25A	MP-3256	\$49.95	\$44.95	\$39.95
120W	12V	8.5A	MP-3258	\$99.95	\$89.95	\$79.95

### DIN RAIL BRACKETS

DIN Rail brackets to suit switchmode DIN and enclosed frame power supplies. MP-3150 suits 25 & 40W models MP-3152 suits 60, 100, 120, 150W models MP-3154 Clip is required for the brackets above, which is then attached onto the DIN rail.



Note: M3 and M4 screws are required.

TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
1 DIN	MP-3150	\$5.95	\$5.25	\$4.75
2 DIN	MP-3152	\$6.95	\$6.25	\$5.50
Clip	MP-3154	\$5.95	\$5.25	\$4.75



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## Select Your Model: "Lab" Power Supplies

			VOLTAGE DC	CURRENT	DISPLAY	OUTPUT	PAGE
	MP-3079		13.8V	12A		SINGLE	359
	MP-3078		13.8V	20A		SINGLE	359
	MP-3089		13.8V	40A		SINGLE	359
	MP-3096		13.8V	5A		SINGLE	359
	MP-3097		13.8V	10A		SINGLE	359
	MP-3098		13.8V	20A		SINGLE	359
	MP-3800		0-24V	17A	ANALOGUE METER (BACKLIT)	SINGLE	360
	MP-3802		0-16V	30A	ANALOGUE METER (BACKLIT)	SINGLE	360
	MP-3840		0-30V	5A	LED	SINGLE	360
	MP-3087		2 X 0-32V	3A	LCD (BACKLIT)	DUAL	360
	MP-3091		0-15V	40A	LCD (BACKLIT)	SINGLE	360
	MP-3842		0-16V 0-27V 0-36V	5A 3A 2.2A	LCD (BACKLIT)	SINGLE	360
	MP-3844		0.3-30V	3.75A	LCD (BACKLIT)	SINGLE	360

### FIXED 13.8V SWITCHMODE

High current general workshop power supplies for equipment component testing, etc. Internal cooling fans assist cooling at higher temperatures.

- Banana socket style binding posts
- LED power on indication
- Rear mounted M205 fuse
- Ideal for 12V amateur transceivers, linear amps and high powered car stereo bench testing
- 12, 20 and 40A models



### POWERTECH

SPECIFICATIONS	ALL MODELS
Input Voltage Range	190 - 240V AC
Output Voltage Range	13.8V DC regulated
Output Connections	4mm Banana/Clamp Type
Recommended Fuse	m205 4 amp
Dimensions	MP-3079: 170 x 160 x 85mm MP-3078: 170 x 190 x 95mm MP-3089: 190 x 260 x 105mm

TYPE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
Fixed	12A	MP-3079	\$69.95	\$62.95	\$55.95
Fixed	20A	MP-3078	\$99.95	\$89.95	\$79.95
Fixed	40A	MP-3089	\$199.00	\$178.95	\$158.95

### FIXED 13.8V

These good looking power supplies are available in three current capacities of 5, 10 and 20 amp. They use proven technology and are designed to give long service life in workshop situations.

The range features short circuit protection on the output and a fused input.



### POWERTECH

SPECIFICATIONS	MP-3096	MP-3097	MP-3098
Output Voltage	13.8VDC	13.8VDC	13.8VDC
Rated Output	5 Amps	10 Amps	20 Amps
Surge Current	7 Amps	12 Amps	22 Amps
Voltage Regulation	<5%	<5%	<5%
Ripple Voltage	100mV	120mV	150mV

TYPE		CAT.	Qty 1+	Qty 3+	Qty 6+
Fixed	5A	MP-3096	\$99.95	\$89.95	\$79.95
Fixed	10A	MP-3097	\$139.00	\$124.95	\$110.95
Fixed	20A	MP-3098	\$199.00	\$178.95	\$158.95

## LABORATORY POWER SUPPLIES (CONTINUED)

### COMPACT SWITCHMODE VARIABLE

Compact size, high current, variable output and fan cooling make these the ideal power supply for your bench. They are protected against thermal overload and short circuit and will display a warning LED in the event of a fault condition. Current and voltage are displayed on separate backlit analogue meters. Two models available.



1 YEAR WARRANTY

SPECIFICATIONS	MP-3800	MP-3802
Output Voltage	0 - 24VDC	0 - 16VDC
Output Current	Max 17A, 15A continuous	Max 30A, 25A continuous
Ripple	<9mVp-p at rated load	<9m Vp-p at rated load
Output Regulation	<1%	<1%
Dimensions	148(W) x 162(D) x 62(H)mm	148(W) x 162(D) x 62(H)mm

TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
Variable	MP-3800	\$149.00	\$133.95	\$118.95
Variable	MP-3802	\$199.00	\$178.95	\$158.95

### 0 TO 36VDC, 0 TO 5A SLIMLINE

Often in a workbench environment you don't need massive amounts of power, and your huge unit is underutilised. This slimline power supply provides up to 80W of power, still plenty of grunt for many tasks. It provides constant current and constant voltage options. Simply select your power range, then adjust the controls to obtain your desired outputs. Ranges available are 0-16V @ 0-5A, 0-27VDC @ 0-3A, and 0-36V @ 0-2.2A. Output is provided via banana sockets which will accept insulated banana plugs. A powerful, compact unit for your workbench or mobile toolkit. Includes banana to alligator clamp leads.

- Constant current / constant voltage options
- Up to 5A current
- Compact design



1 YEAR WARRANTY

SPECIFICATIONS	MP-3842
Input Voltage	100-240VAC @ 50/60Hz
Output Voltage/Current	0-16VDC 0-5A (Max), 0-27VDC @ 0-3A (Max), 0-36VDC @ 0-2.2A (Max)
Output Power	80W Max.
Ripple And Noise	<30mVPP
Ripple Current	<10mA
Load Regulations	<20mV @ 100% load
Weight	886g
Dimensions	53(W) x 300(D) x 138(H)mm

TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
Variable	MP-3842	\$149.00	\$134.00	\$119.00

### 0.3 TO 30VDC, 0 TO 3.75A PORTABLE

This is the ultimate power source for technicians and hobbyists without much space on their workbench. It has all the features of an exceptionally accurate power source, in a lightweight case barely as big as a multimeter. Digital controls and a large display provide accurate control. The supply can be operated in constant current or constant voltage modes, up to a maximum of 50W. It's short circuit protected with banana plug sockets for power output, and it conveniently provides two 2A USB charging outlets too.

- Adjustable from 0.3 volt to 30 volt at up to 3.75A with maximum continuous power 50W
- Work in constant voltage mode and current mode
- Large LCD Display
- Output short circuit protection
- Supplied with quality clamp leads



NEW 2018

SPECIFICATIONS	MP-3844
Input Voltage	90 - 265VAC 50-60Hz @ 1A
Output Rating	Voltage range: 0.3 to 30V Current range: 0 to 3.75A Ripple and noise: <150mV p-p Load regulation: 0.1%
Measurement Accuracy	Voltage: 10mV Current: 1mA
Weight	370g
Dimensions	88(W) x 185(H) x 38(D)mm

TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
	MP-3844	\$199.00	\$178.95	\$158.95

### 0 TO 30VDC, 0 TO 5A REGULATED POWER SUPPLY

A must have for laboratory or home workbenches. This robust DC power supply features digital control and a large easy to read LED display. Over-current and short circuit protection are built-in. Voltage is adjustable from 0-30V and current can be adjusted from 0-5A, all through the large front dials.

- Includes a tough carry handle making it ideal for technicians to haul around the lab
- Perfect for educational, industrial, or professional users



1 YEAR WARRANTY

SPECIFICATIONS	MP-3840
Output Voltage	0-30VDC
Output Current	0-5A
Ripple And Noise	<1.0mVRMS
Ripple Current	3mA(ms)
Dimensions	120(W) x 185(H) x 270(L)mm

TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
Variable	MP-3840	\$179.00	\$160.95	\$142.95

### 0 TO 32VDC, 0 TO 3A DUAL OUTPUT, DUAL TRACKING

This automatic constant-voltage/constant-current transfer type power supply is effectively two 0-32VDC 3 Amp power supplies in one case. The two outputs can be operated independently, connected in parallel, or series for multiple output currents and voltages. Coarse and fine voltage controls are provided on both outputs, along with current limit control. Both outputs have independent digital voltage and current meters.

- Displays are backlit and extremely easy to read



1 YEAR WARRANTY

### POWERTECH

SPECIFICATIONS	MP-3087
Output Voltage	2 x 0 - 32VDC
Output Current	0 - 3 Amps (x 2)
Ripple And Noise	<1.0mVRMS
Load Regulation	10mV max.
Dimensions	185(H) x 260(W) x 400(D)mm
Weight	10kg approx

TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
Variable	MP-3087	\$399.00	\$359.00	\$319.00

### 0 TO 15VDC, 0 TO 40A REGULATED

A good lab power supply is a must-have for any serious hobby bench. This one provides the flexibility of wide voltage range and current limiting. A large backlit LCD provides feedback. Thoughtful design makes this unit very functional. While it's capable of up to 40A, if you're only using up to 5A, handy banana sockets are provided on the front panel. If you need up to 40A, heavy duty binding posts are provided at the rear of the unit. The lightweight switchmode design means you can move it around as required, while voltage ripple is kept below 100mV.

- 0-15V variable output voltage
- 0-40A variable current limiting
- Overload and over temperature protected



NEW 2018

SPECIFICATIONS	MP-3091
Input	220V-240V @ 50Hz
Variable Output Voltage	0-15V
Variable Output Current Limiting	0-40A
Ripple & Noise (Peak-Peak)	100mV
Protections	Overload & Over Temperature
Weight	2.9kg
Dimensions	336(W) x 87(H) x 214(D)mm

TYPE	CAT.	Qty 1+	Qty 3+	Qty 6+
0-15 VDC 0-40A	MP-3091	\$349.00	\$309.00	\$279.00



## MAINS EXTENSION LEADS

### EXTENSION LEADS - WHITE

These leads have the new "safe socket", which has a flange around it, so kids can't slide a knife in and hurt themselves.

- Off white colour



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2m	PS-4122	\$5.50	\$4.95	\$4.40
3m	PS-4125	\$6.95	\$6.25	\$5.55
5m	PS-4130	\$9.95	\$8.95	\$7.95
10m	PS-4134	\$16.95	\$14.95	\$13.45

### EXTENSION LEADS - BLACK

Perfect for stage, lighting, DJ or other applications where the inconspicuousness of a black extension lead is required.

- Rated to 10A max



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2m	PS-4152	\$5.50	\$4.95	\$4.40
5m	PS-4155	\$9.95	\$8.95	\$7.95
10m	PS-4157	\$16.95	\$14.95	\$13.45

### HEAVY DUTY 10A EXTENSION LEADS

If you know you're going to be demanding a lot of power, a heavy duty extension cable is the way to go. Especially important for a worksite with power-hungry tools. Heavy duty 1.5mm<sup>2</sup> copper cable (standard leads are generally 1.0mm<sup>2</sup>).

- Heavy duty conductors
- Ideal for power tools



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
10m	PS-4198	\$22.95	\$20.45	\$17.95
20m	PS-4200	\$39.95	\$35.95	\$31.95

### PIGGY BACK 10A EXTENSION LEADS

These extension lead provides you with a piggyback socket so you don't "use up" an outlet where you're plugging it in. Genius!

- Rating: 240VAC @ 10A / 2400W



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1m	PS-4153	\$6.95	\$6.25	\$5.55
3m	PS-4154	\$11.95	\$10.75	\$9.55

### HEAVY DUTY DUAL OUTPUT 10A EXTENSION LEAD

This is a safe way to connect two power tools, or run two extension leads from one mains outlet. Featuring a fully moulded design, there's no plastic double-adaptor lying around when there doesn't need to be.

- Heavy duty cable
- Moulded Y-split design

SPECIFICATIONS	PS-4196
Voltage	240VAC
Max. Total Load	10A/2400W
Weight	326g
Cable Length	600mm
Cable	3 Core 1.0mm <sup>2</sup>



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
600mm	PS-4196	\$14.95	\$13.45	\$11.95

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### 3 WAY ROUND 10A POWERBOARD WITH 3M EXTENSION CORD

Featuring three mains outlets and a 3m lead, it's all integrated into a handy cable reel for safe, tangle free storage. When it's time to use it again, just unwind and you're ready to go. Features a master power switch and overload protection.

- Overload protection
- Compact reel
- Master power switch



SPECIFICATIONS	MS-4043
Max Power Rating	240VAC @ 10A / 2400W
Weight	446g
Dimensions	47(H) x 149(D)mm

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
3m	MS-4043	\$14.95	\$13.45	\$11.95

### 4 WAY ROUND CABLE REEL WITH 15M 10A EXTENSION CORD

Combining a powerboard and an extension lead, this powerboard hub saves you from tangled cables and frustration. To use, simply unroll the cable and connect your mains appliances. Once you're finished, disconnect your appliances and use the integrated reel to easily wind the 15m extension lead away. No tangles, no fuss, and it's already set for next time! Also features a master power switch, as well as overload protection.



SPECIFICATIONS	MS-4039
Max Power Rating	240VAC @ 10A / 2400W
Weight	1.8kg
Dimensions	193(W) x 253(H) x 160(D)mm

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
15m	MS-4039	\$39.95	\$35.95	\$31.95

### CABLE TIDY FOR EXTENSION POWER LEADS UP TO 25M

No more tangled extension leads! This handy cable tidy will hold a lead up to around 25m long (even a heavy duty one). Simply coil it around and clip the plug and socket into the integrated clips. Then when it's time to use it, unwinding will be an absolute breeze! It even features a carry handle!

Note: Extension lead must be fully uncoiled from the cable tidy before use.

- No more tangles
- Integrated plug & socket clips
- Carry handle

Note: Cable not included.



SPECIFICATIONS	PS-4194
Weight	142g
Dimensions	472(W) x 128(H) x 18(D)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
PS-4194	\$4.95	\$4.45	\$3.95

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## MAINS HARDWARE - 15A

### PORTABLE RCD WITH 15A TO 10A MAINS PLUG CONVERSION

Convert your 15A power lead to fit a 10A power outlet whilst adding the additional safety of RCD earth leakage protection. Ideal if you only have a device with a 15A mains plug, and you are located somewhere that does not have a 15A power outlet available.

Features a 10A circuit breaker/RCD in case you accidentally overload the device. Not suitable for outdoor use, unless combined with our HB-6178 weatherproof case.

SPECIFICATIONS	MS-4044
Voltage	240VAC, 50Hz
Max load	2400W 10A
Rated residual current	30mA
RCD type	AC & DC pulse sensitivity
Dimensions	180(H) x 135(D) x 124(W)mm
Electrical Safety Approval Certificate No.	SAA122512EA



	CAT.	Qty 1+	Qty 4+	Qty 10+
15A to 10A Mains Adaptor	MS-4044	\$79.95	\$71.95	\$63.95

### HEAVY DUTY 15A EXTENSION LEADS

Proper heavy duty mains extensions leads with 15A plugs and sockets, and a thick orange flexible cord. The 15A socket end also features an internal LED to indicate that power is present.

- Perfect for caravans and motorhomes



	CAT.	Qty 1+	Qty 4+	Qty 10+
10m	PS-4182	\$24.95	\$22.45	\$19.95
20m	PS-4186	\$39.95	\$35.95	\$31.95

### WEATHERPROOF (IP55) CARAVAN POWER ADAPTOR WITH RCD

Allows you to connect your caravan/RV into a normal domestic power outlet. Weatherproof rated to IP55 it is safe to leave outside, and with a residual current device (RCD) safety switch, this product gives you the ability to safely and legally connect your caravan 15A power lead to a normal 10A power outlet. Also includes a 10A circuit breaker in case you accidentally overload the device. A must have for any caravan or RV.

- Fully certified for electrical safety (AS/NZS 3190) and compliant to Australian Standards for caravan wiring (AS/NZS 3001).



	CAT.	Qty 1+	Qty 4+	Qty 10+
	MS-4048	\$119.00	\$106.95	\$94.95

### PORTABLE RCD WITH 4 X 15A SOCKETS TO 15A MAINS PLUG

Unlike conventional 10A units, you can draw a maximum 3600W from this one. It's made in a power block configuration, which includes a carry handle, and a pedestal base to keep all the plugs off the ground. It features a high power 15A Australian approved plug, and 30mA max RCBO protection. The 4 x outlets are 15A sockets, not 10A sockets.

- IP33 Dust/water ingress protection
- 30mA RCBO
- 15A Plug - 3600W rated



SPECIFICATIONS	MS-4047
Input	1 x 15A Mains Plug
Output	4 x 15A Mains Sockets (3600W total combined output)
Weight	1kg
Dimensions	180(H) x 170(W) x 140(D)mm
Cable Length	1.8m

	CAT.	Qty 1+	Qty 4+	Qty 10+
4x15A	MS-4047	\$99.95	\$89.95	\$79.95

## OUTDOOR HARDWARE

### MAINS PLUG AND SOCKET PROTECTOR - IP44

There are often instances where you have no choice but to connect mains appliances out in poor weather. Sure, your appliance might be weatherproof, but you need to protect the mains plug and socket from the weather too. This brilliant enclosure safely encapsulates a mains plug and socket connection (say from an extension lead to a mains powered appliance), to ensure no water gets into the connection. It not only stops a short circuit that will trigger your circuit breaker, it prevents accidental electrocution from water ingress. Of course, in good weather it still prevents accidental disconnection and damage to the mains plug and socket.

- Protects mains plug and socket
- IP44 waterproof rating
- Heavy duty



SPECIFICATIONS	HB-6172
Suitable Cable	6.5mm - 9.0mm Diameter
Dimensions	251(W) x 76(H) x 85(D)mm, 165g

	CAT.	Qty 1+	Qty 4+	Qty 10+
IP44	HB-6172	\$9.95	\$8.95	\$7.95

### WEATHERPROOF OUTDOOR POWERBOARD ENCLOSURE - IP54

This fantastic enclosure takes your average mains powerboard and turns it into a safe, IP54 rated weatherproof power distribution system! It features a heavy duty lockable latch to keep things closed, with an o-ring seal to keep the water out. The cavity inside is around 295(W) x 180(L) x 100(D)mm, which is enough for most 4-way powerboards, and will house plugpacks for Christmas lights and garden ornaments with ease. A 5-way cable grommet is built-in (1 for powerboard, 4 for the items connected to the powerboard). Comes with optional drill holes for M20 or M25 cable glands.

- Wall mountable & lockable



SPECIFICATIONS	HB-6173
Weatherproof Rating	IP54
Suitable Cable	6.9mm - 10.5mm diameter
Dimensions	330(W) x 125(H) x 210(D)mm, 915g

	CAT.	Qty 1+	Qty 4+	Qty 10+
IP54	HB-6173	\$29.95	\$26.95	\$23.95

### 2 OUTLET 10A POWER GARDEN STAKE - IP44

Get the right powerboard for the job! This is a versatile and safe way to distribute power in your garden. It features two mains outlets, which have integrated spring-loaded covers. A hood further protects from water. A long spike makes it easy to push into the ground, while a handle on the top allows easy removal.

- IP44 water resistant
- Spring loaded socket covers
- Carry handle



SPECIFICATIONS	MS-4097
Max Rating	240VAC @ 10A / 2400W
Cable Length	1.8m
Water Resistant Rating	IP44
Weight	423g
Dimensions	147(W) x 395(H) x 70(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
IP44 2 Way	MS-4097	\$19.95	\$17.95	\$15.95

### HEAVY DUTY 4 OUTLET 10A POWER BLOCK - IP44

This is a versatile and weather resistant 4-way powerboard. An integrated stand keeps everything off the ground, while the combination of spring-loaded covers and a built-in hood help keep any water away from the mains outlets. The integrated overload protection and smart design also increases the safety of outdoor power.

- Spring loaded outlet covers
- Integrated overload protection



SPECIFICATIONS	MS-4086
Max Power Rating	240VAC @ 10A / 2400W
Water Resistant Rating	IP44
Cable Length	1.8m
Weight	1.2kg
Dimensions	185(W) x 264(H) x 183(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
IP44 4 Way 10A	MS-4086	\$24.95	\$22.45	\$19.95

## ▼ POWERBOARDS

### 4 & 6 WAY POWERBOARDS

These powerboards will allow 4 or 6 appliances to be plugged in at once to a single power point.

- Maximum load is 2400 watts
- Includes a safety overload with reset switch
- White in colour
- Cord length 1 metre
- Power LED indicator



4 OR 6 WAY  
AVAILABLE

SAA approved.

**POWERTECH**

		CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	1m	MS-4040	\$9.95	\$8.95	\$7.95
6 Way	1m	MS-4045	\$11.95	\$10.75	\$9.55

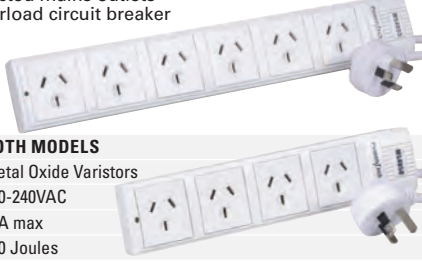


WARRANTY

### POWERBOARDS - SURGE & OVERLOAD PROTECTION

These powerboards offer a choice of 4 or 6 outlets, all surge protected. Guard your expensive Hi-Fi, TV, or VCR etc. against damage.

- Surge and spike protected mains outlets
- 10 Amp resettable overload circuit breaker
- Cable length: 1 metre
- Colour: White



WARRANTY

**POWERTECH**

SPECIFICATIONS	BOTH MODELS
Surge Protection	Metal Oxide Varistors
Supply Voltage	230-240VAC
Current Rating	10A max
Energy Absorption	230 Joules

		CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	1m	MS-4051	\$11.95	\$10.75	\$9.55
6 Way	1m	MS-4055	\$14.95	\$13.35	\$12.70

### 4 WAY POWERBOARD - FILTER / SURGE & OVERLOAD PROTECTION

This powerboard offers 4 outlets, all filtered and surge protected. Guard your expensive Hi-Fi, TV, or VCR etc. against damage.

- 4 Surge and spike protected mains outlets
- 10 amp resettable overload circuit breaker
- Power on indicator in switch
- Cable length: 1 metre



**POWERTECH**

SAA approved

SPECIFICATIONS	MS-4057
Surge Protection	Metal Oxide Varistor
Supply Voltage	230-240VAC
Current Rating	10A max
Protection Mode	Active - Neutral
Max Surge Current	6000A
Typical Capacitance	430pF
Clamping Voltage	<775 @ 50A
Energy Absorption	175 joules
Approvals Number	N17298



WARRANTY

		CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	Black 1m	MS-4057	\$19.95	\$17.95	\$15.95

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### 4 WAY POWERBOARD WITH 3 METRE LEAD

Compact with a 3m lead, and master switch for safe connections.

- Surge and overload protection
- Master switch



SAA approved

SPECIFICATIONS	MS-4053
Surge Protection	175 Joules
Supply Voltage	240VAC / 50Hz
Current Rating	10Amps
Power	2400W (Max)
Lead Length	3m
Cable	1.0mm



WARRANTY

		CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	3m	MS-4053	\$19.95	\$17.95	\$15.95

### POWERBOARDS WITH SURGE OVERLOAD PROTECTION

Individual switches provide safety for connecting and disconnecting your appliances, while overload and surge protection ensure they're running safely. Surge protection is a must for expensive or sensitive equipment such as TVs, computers, Hi-Fi equipment and more. 45mm spaced sockets to suit leads and slimline plugpacks.

SAA approved

MS-4063



MS-4061

INDIVIDUALLY  
SWITCHED



WARRANTY

SPECIFICATIONS	BOTH MODELS
Surge Protection	Metal Oxide Varistor
Supply Voltage	240VAC / 50Hz
Maximum Current	10A
Surge Current	4500A
Power Rating	2400 Watts Max
Typical Capacitance	430pF
Clamping Voltage	175J
Response Time	< 20ns
Dimensions (excluding switches)	235(W) x 85(H) x 30(D)mm (MS-4061) 330(W) x 75(H) x 30(D)mm (MS-4063)

		CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	1m	MS-4061	\$29.95	\$26.95	\$23.95
6 Way	1m	MS-4063	\$34.95	\$31.45	\$27.95

See page 362 for Weatherproof Boxes to suit

### 4 WAY MAINS POWERBOARD WITH 2 X USB AND SURGE PROTECTION

This 4 way powerboard includes 2 rapid charge USB sockets suitable for charging most smart devices and has filters for protection of mains products. Ideal for protecting your computer from spikes and surges.

- 4 surge and spike protected mains outlets
- 2 rapid charge USB sockets 3.1A total
- 10 amp resettable overload circuit breaker
- Cable length: 1 metre



SAA approved



WARRANTY

SPECIFICATIONS	MS-4100
Surge Protection	Metal Oxide Varistor
Supply Voltage	240VAC / 50Hz

		CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	1m	MS-4100	\$34.95	\$31.45	\$27.95

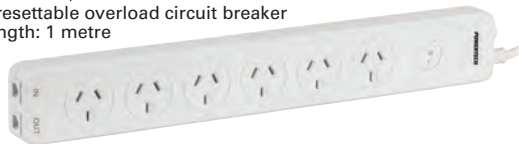


## POWERBOARDS (CONTINUED)

### 6 WAY MAINS POWERBOARD WITH 2 X TELEPHONE SURGE PROTECTION

This 6 way powerboard has filters for protection of mains and telephone products: phones, modems, answering machines, cordless telephones, faxes. Ideal for protecting your computer and phone line from spikes and surges.

- 6 surge and spike protected mains outlets
- Telephone / data line surge & spike protection RJ45 sockets (RJ12 reducer included)
- 10 amp resettable overload circuit breaker
- Cable length: 1 metre



SAA approved

SPECIFICATIONS	MS-4102		
Surge Protection	Metal oxide varistors	Max Surge Current	6,000A
Supply Voltage	240VAC/ 50Hz		
Current Rating	10A max	Energy Absorption	175 joules
Protection Mode	PN	Response Time	< 20 nanoseconds

		CAT.	Qty 1+	Qty 4+	Qty 10+
6 Way	1m	MS-4102	\$29.95	\$26.95	\$23.70

See page 362 for outdoor powerboards.

### 10 WAY HOME THEATRE SURGE PROTECTED POWERBOARD

This is the perfect addition to your home theatre, music gear or home office setup. This powerboard features 10 surge and spike protected sockets, including 2 wide sockets for large power adaptors. It also includes 2 USB ports for charging Smartphones and Tablets. Surge protection and EMI/RFI filtering protect against mains power fluctuations, with each socket protected three ways: active, neutral and earth. Additional protection is provided by the built-in circuit breaker. This powerboard also has data protection (for a network connection), satellite/cable TV video protection, and protection for your TV antenna.



- Separate Data Line & TV Antenna/Cable TV protection
- 144,000A surge protection
- 2 USB charging sockets & 2 extra wide sockets
- Dimensions: 360(L) x 125(W) x 32(H)mm

SAA approved

POWER FILTER	MS-4033	DATA LINE	MS-4033
Surge Protection	Metal Oxide Varistors	Filter Type	Gas Tube Arrestor
Supply Voltage	250VAC	Surge Current	1200A (1kV/μs)
Current Rating	10A max. 2599W	Impulse Discharge Current	10kA (8/20μs)
Protection Mode	A-Nm N-E, E-A	Capacitance	<5pF
Max Surge Current	144,000A	Clamping Voltage	600V
Typical Capacitance	400pF	TV Surge Protection	Gas Tube Arrestor
Clamping Voltage (@50A)	<775V	DC Strike Voltage	230V to max. 600V
Energy Absorption	4300 joules	Surge Current	4500A
Response Time	<2ns	Energy Dissipation	225 joules
Filtration	EMI/RFI	Response Time	<10ns

		CAT.	Qty 1+	Qty 4+	Qty 10+
10 Way	1.8m	MS-4033	\$79.95	\$71.95	\$63.95



WARRANTY

## MAINS DOUBLE ADAPTORS

### MAINS DOUBLE ADAPTORS

- 240V Double Adaptors
- Standard, right & left types



	CAT.	Qty 1+	Qty 4+	Qty 10+
Standard	PP-4032	\$2.75	\$2.45	\$2.25
Right Hand	PP-4035	\$3.50	\$3.15	\$2.80
Left Hand	PP-4036	\$3.50	\$3.15	\$2.80

### MAINS SURGE PROTECTOR DOUBLE OUTLET

Features three-way protection across active-neutral, active-earth and neutral-earth and is fully approved for electrical safety. Providing adequate protection against most surges in mains voltages, they can save you many times the cost of these units in repairs or insurance claims.

Product may vary from the one shown.



SPECIFICATIONS	MS-4015
Load Rating	240VAC 50Hz 10A
Energy Absorption	175J
Surge Current	60000A

	CAT.	Qty 1+	Qty 4+	Qty 10+
Double Power Point	MS-4015	\$9.95	\$8.95	\$7.95



WARRANTY

### 2 USB OUTLET 3.1A CHARGER WITH MAINS POWER OUTLET

Provides up to 3.1A charging shared between two USB outlets, with a pass through mains socket allowing you to connect an additional main powered device!



WARRANTY

SPECIFICATIONS	MS-4007
Rating	230-240VAC, 50Hz
Current	10A Max, 2400W
USB Outlet	5VDC 3.1A
Dimensions	44(w) x 93(H) x 55(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Single + 2 USB	MS-4007	\$18.95	\$16.95	\$14.95

### DUAL MAINS SOCKET POWER HUB WITH 2 USB OUTLETS (2.5A) AND SMART PHONE DOCK

This fantastically versatile unit provides you with dual mains outlets, as well as two high-power (2.5A) USB charging outlets. It even includes a handy cradle to prop up your smartphone or tablet. The cradle does not provide a charging connection, so it's infinitely universal, just use your favourite charging cables. It's all fitted to a 1.5m mains lead, so it's perfect for desk and counter-top use. Convenient, with a smart white finish.



SPECIFICATIONS	MS-4103
Input	240VAC, 50Hz / 2400W (Max.)
Output	2 x 240 VAC, 50Hz 2 x 5 VDC, 2.5A (Max.)
Dimensions	103(H) x 100(W) x 44(D)mm
Cable	1.5m

	CAT.	Qty 1+	Qty 4+	Qty 10
	MS-4103	\$24.95	\$22.45	\$19.95



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## MAINS DOUBLE ADAPTORS (CONTINUED)

### CLIP OVER WALL PLATE WITH 2 USB PORTS

A detachable wall plate adaptor that can be easily fixed to an existing power outlet without opening and rewiring which adds 2 x USB ports. The 2 x USB outlets can charge and power your USB devices up to 3.1A in total. Using these two USB ports, you can turn any wall outlet into a mobile device charging station. This smart unit is embedded with surge protection, switchable light sensor night light and emergency light. It suits widely used wallplates such as Clipsal, HPM, etc. Perfect for the kitchen, bathroom, or garage.

- 2 x USB outlets
- 2 x Mains power outlets
- Emergency light in white light
- Light control night light in blue light

SPECIFICATIONS	MS-4009
Voltage	230-240V
Frequency	50/60Hz
Current	10A (Max.)
Power Rating	2400 Watt (Max.)
Protection Mode	Fuse & MOV Protected
USB Outlets	5V, 3.1A (total)
Dimensions	134(L) x 95(W) x 38(D)mm (excluding pins)

	CAT.	Qty 1+	Qty 4+	Qty 10+
Double + 2 USB	MS-4009	\$29.95	\$26.95	\$23.95

### 2 OUTLET WORKSTATION CENTRE WITH USB 1A SOCKET

This innovative power adaptor fits into a standard 60mm desk grommet allowing the power cord to be discreetly run through the hole without cluttering your desk. It features 2 surge protected mains power sockets and 1 USB port for power. Installation takes just seconds with no tools required.

- Max Current: 10A
- Surge Protected to 175 joules
- USB Socket: 5V at 1A
- Power Cord Length: 900mm

	CAT.	Qty 1+
Double + 1 USB	MS-4082	\$12.45

### 240V MAINS WI-FI WIRELESS SWITCH MODULE WITH APP

Designed to transform your traditional one way mains power point into a modern Wi-Fi switch so you can control connect devices via your Smartphone, from anywhere. It features a schedule timer to automatically turn devices on and off, and a countdown timer to turn devices off after a pre-set time period. The App for this unit can be freely downloaded from Google® Play and App. Store.

#### System Requirements:

- Wi-Fi router
- iPhone®, iPad®, or iPod® (iOS® 6.0 or higher)
- Android® devices with Android® 4.0 or higher

SPECIFICATIONS	MS-6126
Electrical Rating	120V/12A/60Hz/1800W
Wi-Fi	2.4GHz 802.11b/g/n
Dimensions	53(W) x 50(L) x 16(D)mm

	CAT.	Qty 1+
15A 240VAC	MS-6126	\$29.95

### REMOTE CONTROLLED MAINS OUTLET CONTROLLER

The ultimate in convenience - turn any standard mains outlet on and off via remote! Great for switching off hard-to-reach power points too. The remote has a range of up to 30m.

- Wireless On/Off functionality
- 2 x AAA 1.5V
- Dimensions: Adaptor - 95(L) x 52(W) x 60(D)mm  
Remote - 115(L) x 40(W) x 20(H)mm

SPECIFICATIONS	BOTH MODELS
Power Supply	240VAC, 50Hz
Total Loading	10A, 2400W M.40
Radio Frequency	433.92MHz
Range	Typically about 30m in open area.

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 Outlet + Remote	MS-6148	\$19.95	\$17.95	\$15.95
3 Outlets + Remote	MS-6147	\$39.95	\$35.95	\$31.95
Spare Outlet	MS-6149	\$9.95	\$8.95	\$7.95

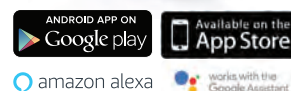
### TPLINK SMART WIFI PLUG

The Smart Plugs are easy to set up, and make it even easier to manage your household electronic devices anywhere in the world with a tap of your smartphone.

With a tap on your smartphone, you can easily turn off the lights and other devices in the living room without getting out of bed, or conveniently schedule all lights to go off by midnight.

You can pair the Smart Plugs with Google Home or Amazon Echo for voice control. And the free Kasa app lets you run them from any Android (4.1 and higher) or iOS (iOS 8 and higher) smartphone.

- Remote Access - Control devices connected to the Smart Plug wherever you have Internet using the free Kasa app on your smartphone
- Scheduling - Schedule the Smart Plug to automatically power electronics on and off as needed, like setting lights to come on at dusk or turn off at sunrise
- Away Mode - Turns your devices on and off at different times to give the appearance that someone is home



amazon alexa works with the Google Assistant

	CAT.	Qty 1+
	YN-8446	\$59.95

### MAINS POWER METER

This intelligent power meter simply plugs into a normal power point (GPO) and turns it into a real-time power monitoring outlet.

You can enter the local price of your electricity and the meter will tell you exactly how much the appliance is costing to run. In addition, the power meter tracks the power used and can display the instantaneous voltage or current being drawn as well as the peak levels that have been drawn. The meter has backup batteries so it will not lose the stored data during a blackout or moving from point to point.

- Simple to install and a valuable tool for monitoring your power consumption



	CAT.	Qty 1+	Qty 4+	Qty 10+
	MS-6115	\$19.95	\$17.95	\$15.95

### MAINS POWER METER WITH EXTENDABLE LCD DISPLAY

A fantastic large LCD and clear power usage numbers make this unit easy to read, but what's even more impressive is the genius design of having the LCD separated from the mains point! An all-in-one meter might seem like a great idea, but if you're measuring the usage of your fridge, or your HiFi system, or something else where the mains point isn't in clear view, it can be very difficult to take readings. Solved! It has all the usual features, power usage in watts, cost conversion, and more.

- Separate wired LCD for better readings
- Displays watts, cost, volts, amps, and CO2 emission
- Display hang-holes for mounting



SPECIFICATIONS	MS-6108
Voltage	240V @ 50Hz
Current	10A Max. /
DISPLAY RANGE	
Volts	200-276VAC
Amps	0.005A-10A
Watts	0.1-2400W
Line Frequency	45-65Hz
Clock Display	±1 Minute per Month
Power Parameter Accuracy	±1.5%
Battery	Ni-Mh Rechargeable 3.6V
CO2	Emissions calculated in kg
Cable Length	1.5m
DIMENSIONS	
Screen	80(H) x 70(W) x 21(D)mm
Power Plug	117(H) x 60(W) x 48(D) (Excluding mains plugs)
Weight	262g

	CAT.	Qty 1+	Qty 4+	Qty 10+
Mains Power Meter	MS-6108	\$29.95	\$26.95	\$23.95

## MAINS OUTLET CONTROL

### 24 HOUR MECHANICAL TIMER A-N SWITCH

Simple and effective for automatically switching your appliances on and off at particular times. Setup takes mere seconds, then set and forget. Works in 15 min increments. It also includes an override switch so you can instantly engage power when required.

- Simple setup
- Override switch

SPECIFICATIONS	MS-6113	1 YEAR WARRANTY
Resolution	15 min increments	
Time Duration	24 hours	
Max Load	10A @ 240V (2400W)	
Dimensions	125(H) x 70(W) x 52(D)mm (excluding mains pins)	
Weight	135g	



		CAT.	Qty 1+	Qty 4+	Qty 10+
10A	240VAC	MS-6113	\$9.95	\$8.95	\$7.95

### HEAVY DUTY OUTDOOR TIMER IP44

These units are simple, but highly reliable when to-the-second accuracy isn't required. With 15-minute resolution, you can adjust the on-off mode through the entire 24hr cycle. Perfect for pool filters, garden lights, and more. Override switch is also included, powered straight from the mains point being controlled. Suitable for outdoor use, but should be protected from extreme weather.

- Mechanical
- IP44 rated
- Spring-loaded cover
- Time can be switched on/off

SPECIFICATIONS	MS-6109	NEW 2018
Power Rating	240VAC @ 10A / 2400W Max	
IP Rating	IP44	
Weight	165g	
Dimensions	79(W) x 91(H) x 75(D)mm	



		CAT.	Qty 1+	Qty 4+	Qty 10+
10A	240VAC	MS-6109	\$19.95	\$17.95	\$15.95

### MAINS TIMER WITH LCD DISPLAY

More advanced than a mechanical timer. You can set it for time of day and also day of the week. The integrated LCD shows current status and guides you through setup. There's also an override on/off/auto selection. If the power goes out, an internal backup battery will retain your settings and accurate time for several days (though obviously won't provide power to your appliance while power is not available). Also includes random mode to switch on lamps or radios to give the impression you're home, while away on holidays.

- Detailed LCD for information
- Override selections
- Random mode
- Time of day and day of week selections

SPECIFICATIONS	MS-6114	1 YEAR WARRANTY
Resolution	1min increments	
Accuracy	1min / month	
Time Duration	24 hours / 7 days	
Operation	Manual / Automatic / Random	
Max Load	10A @ 240V (2400W)	
Dimensions	125(H) x 58(W) x 52(D)mm (excluding mains pins), 135g	

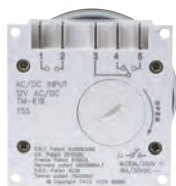


		CAT.	Qty 1+	Qty 4+	Qty 10+
10A	240VAC	MS-6114	\$19.95	\$17.95	\$15.95

### DIGITAL MAINS TIMER SWITCH MODULES

Ideal for automating your heating & lighting or practically any other switching application that requires multiple unattended switching cycles. The timer has eight on/off settings that can be programmed to function on any day, or combinations of days across the week. Each of the on/off settings can be set independently. Each On/Off setting can be associated with a range of days from a single day to every day, thus giving 56 possible on/off cycles per week.

- 12VDC supply voltage
- Switching capacity: 16A @ 240VAC



		CAT.	Qty 1+	Qty 4+	Qty 10+
16A	12VDC	AA-0361	\$59.95	\$53.95	\$47.90

## NIGHT LIGHTS

### LED NIGHT LIGHT WITH SENSOR

No need to trip over the cat or stub your toe when you need to get up in the middle of the night. Keep one of these plugged in and it will give you enough light to see where you're going. Being LED, it uses very little power, so you can leave it on permanently. The built-in sensor turns the light off whenever the room lights are switched on.

- Ideal for kids room, hallways and closets
- Rotates through 360° to light any direction
- No batteries required
- Durable construction
- Unobtrusive size - smaller than a double adaptor
- Dimensions: 50(Dia) x 50(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
240VAC	ST-3181	\$7.95	\$7.15	\$6.35

For small cupboard/wardrobe night lights see page 427

### DUAL USB WALL CHARGER WITH LED NIGHT LIGHT

This is a compact light weight multi-functional dual USB wall charger with LED night light, with both features functioning independent of each other. The night light has 3 different light modes which can be selected with the soft push switch. Perfect for hallways, bathroom, kids room or anywhere one needs comfort lighting. With a built in intelligent module the USB ports will deliver fastest possible charging speeds to smart phones, tablets and other USB devices.

- Light weight and compact, occupies single wall socket
- 3 light modes for night light function
- Fast charging dual USB outlets



SPECIFICATIONS	MP-3429
Input	100-240VAC, 50Hz
Output	5VDC 3A (Shared), Dual USB
Dimensions	55(Dia.) x 49(L)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
	MP-3429	\$19.95	\$17.95	\$15.95

### MAINS NIGHT LIGHT WITH TORCH

A beautifully designed night light that plugs into a powerpoint and will automatically illuminate a dark hallway, stairway or any room when motion is detected. It has a built-in low light sensor so that it is only activated at night or during low light conditions. The torch sits in an induction charge base and can be easily removed for use during power outages.



SPECIFICATIONS	ST-3146
Power	110-240VAC
Built-In Battery	2 x 2450 3.7V 120mAh Li-ion
15 x LED Night Light / 5 x LED Torch	
Charging Time	8 hours
Burn Time	15 LED: >1h / 5 LED: >5h
Sensor Distance/Angle	2.3 / 60°
Dimensions	170(H) x 75(D) x 54(W)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
240VAC	ST-3146	\$24.95	\$22.35	\$19.70



Shop online for your Jaycar Electronics products and check out our latest products and promotions on our website.

Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)




## CIRCUIT TESTERS & MONITORS

### INLINE RCD CIRCUIT BREAKER

A vital safety device for anyone that works with electric power tools. It can also be a lifesaver when used with electric grass cutters, electric pumps, rice cookers, water heaters, induction cookers and hair dryers. As this unit is pre-wired with an AS/NZS rated mains plug and socket, no license is required to install it!

SPECIFICATIONS	QP-2002
Rated Voltage	240VAC
Rated Current	10A
Trip Current	30mA
Protection Class	IP65



	CAT.	Qty 1+	Qty 3+	Qty 6+
10A 240VAC	QP-2002	\$34.95	\$31.45	\$27.95

1 YEAR WARRANTY

### POWER POINT & EARTH LEAKAGE TESTER

A professional socket tester with modern, ergonomic and durable design, to test the safety of installed mains socket. Also checks 30mA RCDs, a unique soft-touch button tests that an RCD in the circuit trips within 300ms when a nominal 30mA earth fault current is applied; a further button, the earth volts touchpad, detects raised earth voltages above 50VAC, thus indicating potentially dangerous installations. Three vivid bicolour LEDs and a buzzer provide a quick-to-check combination of signals which indicate correct wiring, missing earth, live/neutral reverse, earth/live reverse, issuing neutral, live faults, and those errors detected by the two pushbutton tests.

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QP-2004	\$34.95	\$31.45	\$27.95



1 YEAR WARRANTY

### SINGLE RCD (SAFETY SWITCH) OUTLET

RCDs (residual current devices), also commonly called safety switches, are designed to cut the power in a fraction of a second in the event of a fault condition, thereby preventing electrocution. The electrics in your house may be too old to have RCDs installed, or you might want to use a power tool outdoors on an outlet that doesn't have an RCD fitted - use this handy portable one instead. Buy one right now if you don't have RCDs already. Note: RCDs are not a substitute for common sense around mains electricity. While they will work in most situations, they may not in some cases and are not a substitute for current overload devices such as fuses and circuit breakers. Wiring, appliances, leads and power outlets must always be maintained in a safe condition. Test function / reset button



1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
10A 240VAC	MS-4013	\$24.95	\$22.45	\$19.95

## Tech Talk: Warning!

We strongly recommended that you exercise extreme caution if buying 240V mains accessories from so-called "S2 shops". There have been stories in the News in the past where people have been electrocuted from products purchased at these establishments. These tend to be low quality products imported from overseas (usually China) and are not subjected to a rigorous inspection/approval process before being offered for sale. The 240V products offered from us are all electrically tested and approved where appropriate. Why risk the lives of yourself and loved ones by using potentially dangerous goods which are not that much cheaper than products from reputable suppliers?

## TRAVEL ADAPTORS - INBOUND

For use in Australia or New Zealand.

### EARTHED MAINS ADAPTOR

This universal adaptor converts 3 pin plugs from USA or UK to match 3 pin outlets in Australian and New Zealand. Also compatible with the unearthed 2 pin Europlug common throughout Europe.



SAA approved

	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4027	\$9.95	\$8.75	\$7.75

### EUROPE/USA/JAPAN

For use by visitors from all over the world (except South Africa & India).



SAA approved

	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4020	\$12.95	\$11.35	\$10.35

### USA & EUROPE

Accepts overseas 2 and 3 pin plugs and adapts to Australia and New Zealand. For use with electrical appliances from Europe, USA, and some Asian and South American countries.

- Does not convert voltage.
- Approval Number NSW21745
- 50(D) x 52(W) x 52(H)mm



SAA approved

	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4050	\$9.95	\$8.75	\$7.75

To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

**WARNING!**  
These adaptors do not convert voltage. Item being connected must be suitable for 220-240VAC!

### EUROPE AND USA WITH USB

Suitable for plugging overseas appliances from Europe, Bali, USA and Japan into Australia/New Zealand power sockets. Also provides a USB charging port with 1A current to charge your Tablet or Smartphone, eliminating the need to carry multiple power adaptors.



SAA approved

	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4043	\$19.95	\$17.95	\$15.70

### UNIVERSAL TRAVEL ADAPTOR WITH USB

Suitable for plugging overseas appliances into Australia/New Zealand power sockets. Also provides a USB charging port with 2.1A current to charge your Tablet or Smartphone, eliminating the need to carry multiple power adaptors.

- Note: Does not convert voltage.
- Suitable for 240V 50Hz mains



SAA approved

	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4040	\$19.95	\$17.70	\$15.70

For Stepdown Transformers see page 356

## TRAVEL ADAPTORS - OUTBOUND

### MAINS ADAPTOR UNEARTHED FOR USA OR JAPAN

This travel adaptor is designed for use on 2 pin Australian appliances while travelling in Japan or the USA. Only suitable for items without an earth pin such as most mobile phone chargers and laptop power supplies.



SAA approved

	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4026	\$9.95	\$8.75	\$7.75

### MAINS ADAPTORS FOR AUSTRALIA & NZ GOING OVERSEAS

They DO NOT convert voltage, but allow you to plug into various types of wall outlets around the world.

SAA approved

USA	EUROPE	GREAT BRITAIN
USA CANADA EARTHED PP-4025	EUROPE MD EAST UK ASIA PP-4023	UK HONG KONG SINGAPORE EARTHED PP-4024

	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4025	\$9.95	\$8.75	\$7.75
	PP-4023	\$9.95	\$8.75	\$7.75
	PP-4024	\$9.95	\$8.75	\$7.75

### INDIA/SOUTH AFRICA MAINS TRAVEL ADAPTOR

Electrical appliance adaptors for Australians travelling overseas to India or South Africa.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4028	\$9.95	\$8.75	\$7.75

## Select Your Model: Travel Adaptors Selection Guide

Country	Australian to (Outbound)	Includes USB Charger	To (Inbound) Australian	Includes USB Charger
Europe	PP-4042 PP-4023 PP-4047 PP-4029	Yes No Yes(4) No	PP-4050 PP-4043	No Yes
Great Britain	PP-4044 PP-4024 PP-4049 PP-4029	Yes No Yes(4)	PP-4027 PP-4040	No Yes
Hong Kong	PP-4028	Yes	PP-4027 PP-4040	No Yes
India	PP-4028	No		
Japan	PP-4048	No	PP-4020 PP-4050 PP-4043 PP-4040	No No Yes Yes
Japan 2 Pin	PP-4048	Yes	PP-4020 PP-4050	No No
South Africa	PP-4028	No		
USA	PP-4046 PP-4025 PP-4045 PP-4029 PP-4026 PP-4048	Yes No Yes (4) No No Yes	PP-4050 PP-4027 PP-4043 PP-4040	No No Yes Yes

### ✓ TRAVEL ADAPTORS - OUTBOUND

#### OUTBOUND MAINS TRAVEL ADAPTOR 3 PACK TO SUIT USA, EUROPE AND UK OUTLETS



Take your Australian & New Zealand mains appliances overseas, and don't pay a fortune for travel adaptors at the airport. This 3-pack includes adaptors for USA, Europe, and UK style mains outlets, and will cover over 150 countries (See website for list).

*Note: adaptors do not change voltage. Check your appliance's compatibility with the local voltage before connecting.*

CAT.	Qty 1+	Qty 4+	Qty 10+
PP-4029	\$24.95	\$22.45	\$19.95

### ✓ TRAVEL ADAPTORS - USB

#### MAINS TRAVEL ADAPTORS WITH USB CHARGING PORT

Suitable for taking your Australia/New Zealand appliances on your overseas travels. Each provides a USB charging port with 2.1A current to charge your Tablet or Smartphone, eliminating the need to carry multiple power adaptors. 4 versions available to suit most countries.

*NOTE: Does not convert voltage*

##### AUSTRALIA TO EUROPE

Suitable for taking your Australia/ New Zealand appliances overseas to plug into Europlug power sockets.

*SAA approved*



CAT.	Qty 1+	Qty 4+	Qty 10+
PP-4042	\$17.95	\$15.95	\$14.35

### WARNING!

**These adaptors do not convert voltage. Item being connected must be suitable for 220-240VAC!**

#### AUSTRALIA TO UK/HONG KONG

Suitable for taking your Australia/ New Zealand appliances overseas to plug into UK/Hong Kong power sockets.

*SAA approved*

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x USB	PP-4044	\$17.95	\$15.95	\$14.35

#### AUSTRALIA 3 PIN TO USA

Suitable for taking your Australia/ New Zealand appliances overseas to plug into 3 pin earthed USA power sockets.

*SAA approved*

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x USB	PP-4046	\$17.95	\$15.95	\$14.35

#### AUSTRALIA 2 PIN TO JAPAN

Suitable for taking your 2 pin Australia/New Zealand appliances overseas to plug into 2 pin un-earthed Japan/USA power sockets.

*SAA approved*

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x USB	PP-4048	\$17.95	\$15.95	\$14.35

#### OUTBOUND UK & HK MAINS TRAVEL ADAPTOR

Suitable for taking your Australia/New Zealand appliances overseas to plug into UK/ Hong Kong power sockets. Also provides 4 USB charging ports with 3.15A total output current.

*Note: Does not convert voltage, suitable for 240V 50Hz mains.*



*SAA approved*

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x USB	PP-4049	\$24.95	\$22.50	\$19.95

#### OUTBOUND USA MAINS TRAVEL ADAPTOR

Will let you use Australian appliances in the USA and Canada. Also provides 4 USB charging ports with total output of 2.1A current to charge your Tablet or Smartphone.

*Note: Does not convert voltage, suitable for 240V 50Hz mains.*



*SAA approved*

	CAT.	Qty 1+	Qty 4+	Qty 10+
4 x USB	PP-4045	\$24.95	\$22.50	\$19.95

#### OUTBOUND EUROPE TRAVEL MAINS ADAPTOR

Will let you use Australian appliances in Europe, Bali and several other regions. Also provides 4 USB charging ports with 2.1A total output current to charge your Tablet or Smartphone, eliminating the need to carry multiple power adaptors.

*Note: Does not convert voltage, suitable for 240V 50Hz mains.*



*SAA approved*

	CAT.	Qty 1+	Qty 4+	Qty 10+
4 x USB	PP-4047	\$24.95	\$22.50	\$19.95

## Mains Hardware:

### MAINS POWER SWITCHES & GPOS

Tradies pay attention!! Finally, there is a discount alternative to the big brand names! Despite being made in China, this range of general purpose outlets (GPOs) & light switches are all made with the highest quality materials and feature an attractive finish you would be happy to show inside your home. The switches are the same hardwearing long service life type you'll find in the big brand names, and best of all - the price is lower. The savings really start to add up when wiring up the garage or a whole house. They are all fully approved to Australia/New Zealand safety standards, so you don't have to take only our word to ensure quality.

#### 240VAC SINGLE ARCHITRAVE LIGHT SWITCH

Single architrave light switch suited for door frames.

- 10A 2-Way switch
- Narrow profile for architrave mounting
- White colour



	CAT.	Qty 1+	Qty 4+	Qty 10+
Single Switch	PS-4051	\$3.95	\$3.45	\$3.15

#### MAINS LIGHT SWITCHES

Standard GPO size light switch.  
240V 10A rated.

- Safety Approval No. SAA121203EA



	APPROVAL	CAT.	Qty 1+	Qty 4+	Qty 10+
Single Switch	SAA12103EA	PS-4055	\$4.95	\$4.45	\$3.90
Double Switch	SAA12103EA	PS-4057	\$5.95	\$5.25	\$4.75

#### GENERAL PURPOSE OUTLETS - GPOS

These switches are the same hard wearing long service life type you'll find in the big brand names and best of all - the price is lower. The savings really start to add up when wiring up the garage or a whole house. They are all fully approved to Australia/New Zealand safety standards, so you don't have to take only our word to ensure quality.

- Safety Approval No.: ES120046
- Packaged in a handy trade-style polybag

*Note: the screws included with these have a slightly different pitch to the standard 3.5 x 0.8mm, but should still fit plasterboard mounting plates etc.*



	CAT.	Qty 1+	Qty 4+	Qty 10+
Double GPO	PS-4060	\$6.95	\$6.25	\$5.50
Double GPO with extra switch	PS-4046	\$9.95	\$8.75	\$7.75

#### DOUBLE GPO WITH 2- POLE SWITCHES FOR CARAVANS & MOTORHOMES

By law, caravans, motorhomes and other recreational vehicles require a GPO with double pole switch that disconnects both the Active and Neutral to reduce the chance of electric shock.

- 240V 10A rated
- Includes mounting screws

SAA approved



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PS-4069	\$19.95	\$17.70	\$15.70

#### 240V GPO WALL SOCKET WITH 4 X USB 3.15A OUTPUT

This hardwired USB adaptor will fit into a standard GPO wall plate base and give 4 USB power sockets with a total of 3.1 amps. Use it to power or charge pretty much anything that takes power from a USB socket. Instructions are included, however, all fixed wiring products must be installed by a licensed electrician!



	CAT.	Qty 1+	Qty 10+	Qty 50+
4 x USB	PS-4071	\$24.95	\$22.45	\$19.95

We have a Wall Plate Adaptor that converts a single GPO to a double GPO with two handy USB outlets! See page 346 for details



#### DOUBLE GPO WITH 2 X USB CHARGING PORTS

Reduce the amount of USB power supplies that clutter your power outlets. Combining two GPO mains outlets with two 2.1A capable USB outlets, you can charge and power all those USB devices with just the cable! The ports themselves feature spring-loaded dust covers, to keep the contacts clean and free from dust when not in use. The mains (GPO) outlets are standard 240AC 10A outlets. It's a direct replacement for your standard GPO fittings. Features a removable fascia plate for no-fuss painting too.

- 2 x 2.1A 5V USB Outlets
- 2 x 10A 240V GPO mains sockets
- Direct replacement for other standard Australian GPO plates
- Electrical safety authority approved

SPECIFICATIONS	PS-4065
GPO Max Output	240VAC @ 10A
USB Max Output	5VDC @ 2.1A
Face Plate Depth	17mm (12mm excluding switches)
Recess Depth	23mm
Dimensions	118(W) x 72(H) x 35(D)mm (total)



	CAT.	Qty 1+	Qty 4+	Qty 8+
Double GPO + 2 USB	PS-4065	\$29.95	\$26.95	\$23.95

#### SURFACE MOUNT BLOCKS

Standard mounting blocks for powerpoints and wall switches, or any other standard wallplates.



DEPTH	CAT.	Qty 1+	Qty 10+	Qty 50+
16mm	PS-4063	\$4.95	\$4.45	\$3.90
34mm	PS-4062	\$5.95	\$5.25	\$4.75

#### PLASTER BOARD BRACKET



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3033	\$2.95	\$2.60	\$2.30

#### FLAT GPO MOUNT BRACKET

Mounting bracket for standard wall plate to be mounted on plasterboard.

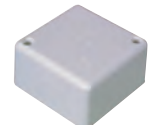
- Install before plasterboard.



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-4077	\$1.95	\$1.75	\$1.65

#### JUNCTION BOX

Size 70 x 70 x 37(D)mm.



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-4066	\$7.95	\$6.95	\$6.25

#### 240V 32A "BP" MAINS CONNECTORS

Available as a pack of 10 standard single screw connectors and 2 double screw. Ideal for safe, reliable earth connections. "BP" style connectors, also known as acorns. (Double screw are for earth).

- 8 single and 2 double per pack



Single

Double

	CAT.	Qty 1+	Qty 10+	Qty 50+
Pkt 10	HM-3192	\$9.95	\$8.75	\$7.75



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[www.jaycar.com.au](http://www.jaycar.com.au)



## MAINS HARDWARE (CONTINUED)

### POWER LEAD 3 PIN

3 Pin 240V AC plug with 2 metres of 3 core cable to bare ends with lug on earth.

- Latest models with insulated pins
- 7.5A.



	CAT.	Qty 1+	Qty 4+	Qty 10+
2m	PS-4110	\$5.95	\$5.25	\$4.75

### 240V LINE PLUG 10A

- Safety clear plastic cover
- Latest models with insulated pins



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PP-4000	\$3.95	\$3.45	\$3.15

### SIDE ENTRY 10A LINE PLUG 240V

- Latest models with insulated pins



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PP-4001	\$4.95	\$4.45	\$3.90

### 2 PIN 32 VOLT PLUGS & SOCKETS

For low voltage applications such as caravans etc up to 15amps.



Line Sockets  
PS-2073

Line Sockets  
PS-2074

Line Sockets  
PS-2075

	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-2073	\$19.95	\$17.95	\$15.95
	PS-2074	\$19.95	\$17.95	\$15.95
	PP-2075	\$9.95	\$8.95	\$7.95

### 240V 10A MAINS LINE SOCKET

- Safety type.



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-4008	\$7.95	\$6.95	\$6.25

### MAINS PANEL SOCKET 10A

Flush mounting 3 pin mains socket. Ideal for many situations where the socket cannot protrude far from its mounting bracket.



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-4094	\$7.95	\$6.95	\$6.25

### MAINS SURFACE SOCKET - 10A

3 pin mains socket, where there is plenty of external room. No need to cut large hole in panel - only for wiring.



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-4092	\$7.95	\$6.95	\$6.25

### 240V LINE MAINS POWER PLUG 15A

Flexible 15A plug (larger Earth pin) with clear body for easy visual check on proper connections. Features an external cord grip and suction boot to prevent ingress into screw terminals and connections.



SPECIFICATIONS	PP-4006
Rated Voltage	250VAC
Rated Current	15A
Enclosure Colour	Clear
IP Rating	IP20
Terminal Type	Screw
Cable Diameter (Max.)	10mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
15A Plug	PP-4006	\$4.95	\$4.45	\$3.95

### 240V CORDLINE SWITCH

Inline cord switch for 2 and 3 core cable up to 10 amps. Switches both neutral and active wires.

- Suitable for AC mains only.



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-4075	\$19.95	\$17.95	\$15.95

### MAINS PANEL SOCKETS WITH COVER

Mains panel socket - spring loaded cover

- Approval no: ES0140170

#### 10A 250VAC

- 50(H) x 50(W) x 27.6(D)mm

PS-4095

#### 15A 250VAC

- 62(H) x 50(W) x 27.7(D)mm

PS-4097



	CAT.	Qty 1+	Qty 10+	Qty 50+
10A	PS-4095	\$6.95	\$6.25	\$5.55
15A	PS-4097	\$6.95	\$6.25	\$5.55

**AUTOMATIC ACCOUNT**  
For Government Departments,  
Schools, Public Companies, Radio &  
TV Stations

### 240V MAINS LINE POWER SOCKET 15A

Clear extension 15A socket with a flexible PVC cover giving complete visibility to screw terminals. Features a cord locking nut and screwed clamp terminals. Useful for 3 core 1.5mm square millimetre ordinary and heavy duty flexible cords.

SPECIFICATIONS	PS-4004
Rated Voltage	250VAC
Rated Current	15A
Enclosure Colour	Clear
IP Rating	IP20
Terminal Type	Screw
Cable Diameter (Max.)	10mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
15A Socket	PS-4004	\$8.95	\$8.05	\$7.15

## Jaycar In The Community:

Gary Johnston, Managing Director of Jaycar handing over the Mercedes Benz van customised as a mobile kitchen in December 2017. It is capable of delivering thousands of FREE hot meals for needy people anywhere in the Sydney area per week.

The van is operated by the Reverend Bill Crews of the Exodus Foundation. Bill has been helping feed homeless people at Ashfield, in Sydney since 1989. The Ashfield centre helps at least a thousand people a day from 8.00am, every day of the year, rain, hail or shine.

Some time ago Bill realised that he could not help people who were in need but could not get to Ashfield. John Singleton, the sponsor of the Ashfield operation, spoke to Gary to see if he could do something. Gary (and Jaycar) decided to help and the van is now busy helping people with a nourishing hot meal all over Sydney.

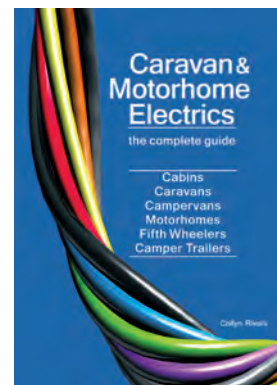


## CARAVAN & MOTORHOME ELECTRICS BOOK

### CARAVAN & MOTORHOME ELECTRICS

A comprehensive text written primarily for owners, designers and builders of caravans, campervans and motorhomes who face unique power demands and challenges that most auto electricians are ill-equipped to properly address. The book covers every aspect of designing, installing and fixing the electrical systems in all type of caravans, camper-trailers and motor-homes. It explains how things work without the sales pitch jargon, and shows how to dramatically increase power efficiency as well as how to install solar power. Written with emphasis on proven techniques that work, rather than ideas that might work. Written by acclaimed Australian author and field expert Collyn Rivers, this is an essential reference for all caravan and motorhome enthusiasts

- Softcover, 96 pages, 297 x 210mm (A4)



	CAT.	Qty 1+
	BE-1536	\$49.95



## POWER LEADS

### 2 PIN POWER LEAD

Black 240V 2 pin power lead as used in many appliances, eg: portable Hi-Fi, shavers etc.

- Universal round IEC C7 connector
- Not earthed
- SAA Approved



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4115	\$5.95	\$5.25	\$4.75
5.0m	PS-4117	\$11.95	\$10.70	\$9.50

### CLOVER LEAF

3 pin clover type to 240V plug

- 1.8 metres long
- Earthed
- SAA Approved



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4120	\$6.95	\$6.25	\$5.50

## IEC LEADS

### STRAIGHT IEC FEMALE TO 240V PLUG

- 1.8 metres long
- Earthed
- SAA Approved



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4106	\$8.95	\$7.95	\$6.95

### STRAIGHT IEC FEMALE TO 240V PLUG - 5M

Extra long mains lead (5 metres) to allow more options with equipment placement or for eliminating an extension lead.



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
5.0m	PS-4105	\$13.95	\$12.35	\$10.95

### RIGHT ANGLE IEC FEMALE TO 240V PLUG

- 1.8 metres long
- Earthed
- SAA Approved



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4107	\$9.95	\$8.75	\$7.75

### 15A IEC C19 FEMALE TO 240V PLUG

- 1.8 metres long
- 15A
- SAA Approved



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4124	\$12.95	\$11.35	\$10.35

## Find Out More In Store:

Our staff offer friendly and helpful service. We're here to help.

### IEC MALE TO 3 PIN (GPO) FEMALE

Ideal for connecting a standard powerboard to a UPS etc.

- SAA approved
- 150mm long



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	PS-4100	\$9.95	\$8.75	\$7.75

### IEC FEMALE TO IEC MALE

- 1.8 metres long
- SAA Approved



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.8m	PS-4108	\$8.95	\$7.95	\$6.95

### IEC MALE TO 2 X IEC FEMALE

Splits "switched" outputs - on the back of a PC that powers the monitor. Then turn on another device - like a printer, desk lamp...anything with an IEC male.

- Length 2.0 metres
- SAA Approved



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m	PS-4104	\$17.95	\$15.95	\$14.35

### 240V MALE TO 2 X IEC FEMALE

- 540mm before join, each output 1550mm long



**SOANAR**

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
2.0m	PS-4102	\$16.95	\$14.95	\$13.35

### 3 OUTLET IEC MAINS LEAD

Ideal for multiple monitors, computers, servers, and so much more. The lead is 1.8m overall, but at the half-way point it splits into three, to provide three IEC power plugs.

Drastically reduces powerboard clutter.

- Rated: 240VAC @ 10A / 2400W Max.



LENGTH	CAT.	Qty 1+
1.8m	PS-4103	\$19.95

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required - see website, T&C or Store Manager for details.





## Select Your Model: Battery Chargers



	MB-3514	MB-3549	MB-3563	MB-3561	MB-3555	MB-3700	MB-3638	MB-3635	MB-3701	MB-3639	MB-3581	MB-3629	MB-3633
<b>Power Input</b>	240V	12/240V	240V	12/240V	240V	USB	240V	12/240V	12/240V	12/240V	12V	240V	12V/240V
<b>Charges Ni-MH</b>	•	•	•	•	•	•	•	•	•	•		•	•
<b>Charges Ni-Cd</b>	•	•	•	•	•	•	•	•	•	•		•	•
<b>Charges Li-ion</b>						•	•	•	•	•	•	•	•
<b>Charges Li-Po</b>						•	•	•				•	•
<b>Charges AAA</b>	•	•	•	•	•	•	•	•	•	•			
<b>Charges AA</b>	•	•	•	•	•	•	•	•	•	•			
<b>Charges C</b>	•				•	•		•	•				
<b>Charges D</b>	•				•			•					
<b>Charges 9V</b>	•				•					•			
<b>USB Outlets</b>				•	•	•	•		•	•			
<b>Fast Charge</b>				•	•	•	•	•	•			•	•
<b>Discharges</b>													•
<b>Page Number</b>	373	373	373	373	374	374	374	374	374	374	375	375	375

### UNIVERSAL NI-CD/NI-MH BATTERY CHARGER WITH CUT-OFF

An affordable universal battery charger that will re-charge Ni-MH/Ni-Cd batteries in AA, AAA, C, D as well as 9V. It will also ensure long battery life by cutting off the voltage when they are fully charged. The unit can charge in various configurations, for example 2 x 9V and 4 x AA batteries simultaneously.

- Recharges: AAA, AA, C, D and 9V batteries
- Cut-off function
- Accepts various combinations of batteries
- Dimensions: 199(L) x 100(W) x 46(H)mm

Batteries must be charged in pairs excluding 9V.

Note: Batteries not included



WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 4+
MB-3514	\$24.95	\$22.35	\$19.70

### 2 HOUR FAST CHARGER FOR AA/AAA NI-MH BATTERIES

Recharge up to four AA or AAA Ni-MH batteries. This handy charger, which utilises Delta V voltage detection, charges batteries to their optimal level to ensure long life. Charge state can be monitored on the integrated electric blue LCD. Charge on the go with the car cigarette lighter cord included as well as the mains plugpack.

- Easy to read and backlit LCD
- Includes bad cell detection
- Charge at the home, office or on the road
- Delta V detection and cut-off
- 1150mA charging current for AA batteries
- 600mA charging current for AAA batteries
- Supplied with mains plugpack and car charging cable
- Dimensions: 105(L) x 68(W) x 30(H)mm



WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 4+
MB-3549	\$29.95	\$26.95	\$23.95

### PANASONIC NI-MH BATTERY CHARGER WITH 4 ENELOOP BATTERIES

Charges both AA and AAA batteries and includes 4 x AA pre-charged. Eneloop batteries are ready for action straight from the shelf as they discharge at an extremely low rate. They can be recharged approximately 1,800 times (compared to approx 500 times for a regular rechargeable).

- Plug-in style wall charger (240V)
- Approx. 10 hour charge time
- Includes 4 x AA Eneloop 2,000mAh batteries
- Dimensions: 75(W) x 118(H) x 40(D)mm

Batteries included



WARRANTY

CAT.	Qty 1+
MB-3563	\$42.95

### 60 MINUTE FAST CHARGER WITH USB PORT

Recharge up to 4 x AA or AAA Ni-MH batteries fast with this handy charger. Using Delta -V voltage detection, 4 individual channels and an auto cut-off safety timer. Also features LED indicators that show the charging status for each channel. Loaded with a USB port capable of 2.1A, great for charging digital cameras, GPS, Smartphones, iPhones® or iPads® and tablets. 240VAC adaptor and a 12VDC adaptor.

- Suitable for 1-4 AA or AAA batteries
- Charge current 2000mA for AA, 850mA for AAA
- Dimensions: 114(L) x 75(W) x 30(D)mm

Note: Batteries not included



WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 4+
MB-3561	\$49.95	\$44.90	\$39.90

## AAA, AA & 9V BATTERY CHARGERS (CONTINUED)

### UNIVERSAL MULTI-CHANNEL NI-MH/NI-CD FAST CHARGER WITH LCD DISPLAY AND USB OUTPUT

This is a powerful, yet flexible, fast charger for all those standard (AA/AAA/C/D) rechargeable cells (Ni-MH or Ni-Cd), up to 6 at a time, including 2 exclusive slots for 9V rechargeable batteries. Up to 1A charging per cell (depending on size) means typical AA cells will only take a couple of hours to charge. Feedback on charging status is provided thanks to an informative LCD panel and status lights. It also provides a convenient 1A USB outlet, so you can charge your smartphone, tablet or any other USB powered device. This unit does not charge rechargeable Lithium or Alkaline cells.

- Quick charge
- USB output
- Intuitive LCD display
- LED indicators (various modes)
- Dimensions: 180(W) x 144(D) x 55(H)mm

Note: Batteries not included.



SPECIFICATIONS	MB-3555
Input Voltage	100-240VAC @ 450mA, 50/60 Hz
Charging Output	AA: 6 x 1.2V @ 1000mA / 6 x 1.2V @ 500mA / USB AAA: 6 x 1.2V @ 500 mA / 6 x 1.2V @ 250 mA / USB C/D: 4 x 1.2V @ 1000mA C/D: 4 x 1.2V @ 500mA / USB 9V: 2 x 9V @ 70mA 9V: 2 x 9V @ 35mA / USB
USB Output	5VDC @ 1A

	CAT.	Qty 1+	Qty 2+	Qty 4+
Universal Multi-Channel Charger	MB-3555	\$59.95	\$53.95	\$47.95

### SINGLE CHANNEL LI-ION/LIFEPO4/NI-MH/NI-CD/EGO FAST CHARGER WITH 1A USB OUTPUT

This is a versatile single-cell battery charger suitable for Li-ion, LiFePo4, Ego, Ni-MH and Ni-Cd batteries. It's especially useful for recharging high capacity Li-ion cells such as 18650, 14500 etc. Its intelligent feedback mechanism provides current charge levels, with selectable recharge level of 500mA and 1A. It automatically protects against overcharging, over discharge, short-circuit, bad-cell, and reverse charging. It also includes a handy USB output up to 1A (not supported by Ni-MH/CD batteries).

- Fast charging (500 / 1000 mA)
- Suits Li-ion, LiFePo4, Ni-MH, Ni-Cd, Ego
- USB outlet
- Dimensions: 120(H) x 43(W) x 30(D)mm



SPECIFICATIONS	MB-3700
Input	USB 5VDC, 1A
Battery Outputs	Output 1: 1.48V - 500/1000mA Ni-MH Ni-Cd 4.2V - 500/1000mA Li-ion 3.65V - 500/1000mA LiFePo4 4.35V - 500/1000mA High Capacity Li-ion Cell Output 2: Ego 4.2V/0.5A Max. Output 3: USB 5VDC, 1A (Except Ni-MH/CD)
Weight	55g

	CAT.	Qty 1+	Qty 2+	Qty 4+
Single Channel	MB-3700	\$19.95	\$17.95	\$15.95

### UNIVERSAL LI-ION CYLINDER BATTERY CHARGER WITH USB

Can accommodate 1 or 2 AA Ni-Cd/Ni-MH batteries or a variety of cylinder shaped Li-ion/Li-Po batteries. It achieves this with an adjustable battery contact. There is also a handy USB port that outputs 2.1A so you can charge your iPad® and Smartphones with ease. Compact size for easy transportation. Includes 5V 2.1A mains adaptor.

SPECIFICATIONS	MB-3638
Ni-Cd/Ni-Mh Charging	1.4V 1000mA
Li-Polymer/Li-Ion Charging	3.7V 1000mA
Suitable For	18650, 14500, 18500, 17670, 17500, 16650, 22650
Dimensions	110(L) x 48(W) x 27(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
	MB-3638	\$29.95	\$26.90	\$23.70



### DUAL-CHANNEL LI-ION / NI-MH BATTERY CHARGER

Features a ~4.2V charging mode for lithium based batteries, and a ~1.48V charging mode for nickel based batteries. Charges and monitors both charging lanes independently, for the best conditioning of your batteries. LCD provides feedback on charge time, current, and battery voltage. Provides bad-cell detection as well as reverse battery / short circuit protection. Supports charging of LiFePo4, Li-ion, Ni-MH, and Ni-Cd batteries.

- Dimensions: 67(W) x 129(H) x 32(D)mm



SPECIFICATIONS	MB-3635
Input	5VDC @ 2A (micro USB) / 12VDC car power
Output	Lithium: 4.2VDC 500/1,000mA (Li-ion) / 3.7VDC 500/1,000mA (LiFePo4), Nickel: 1.48VDC 500mA (Ni-MH / Ni-Cd)
Charging Current	500mA / 1,000mA
Batteries Supported	Li-ion / LiFePo4: 26650, 22650, 18650, 18490, 18350, 17670, 17500, 14500, 10440, 16340, Ni-MH / Ni-Cd: AA, AAA, AAAA, C, D, SC

	CAT.	Qty 1+	Qty 2+	Qty 4+
	MB-3635	\$39.95	\$35.95	\$31.95

### UNIVERSAL LI-ION/NI-CD/NI-MH FOUR CHANNEL BATTERY CHARGER WITH 1A USB OUTPUT

This handy unit provides mains and 12V car power options, so you can charge batteries at home or on the go. It provides charging for up to four Li-ion, Ni-MH, or Ni-Cd batteries. Providing up to 1000mA charging (500mA per battery when using all four channels) for fast recharging. Suitable for AA and AAA sized batteries, it's also suitable for high capacity Li-ion batteries such as 14500 Li-ion cells. It intelligently detects batteries to select the correct charge voltage. It also provides a handy 1A USB outlet for charging all sorts of USB devices.

- Mains lead and 12VDC power lead supplied
- Charges Li-ion, Ni-MH, Ni-Cd compatible
- See our website for full list of compatible batteries
- 1A USB outlet included
- Dimensions: 92(W) x 157(H) x 32(D)mm

SPECIFICATIONS	MB-3701
Batteries	Li-ion, Ni-CD, Ni-MH
Input	AC 100-240V @ 50/60Hz DC 12V @ 1.5A
Output	Li-ion: 4.2VDC @ 500mA x 4, 1000mA x 2 Ni-MH/Ni-Cd 1.48VDC @ 500mA x 4 USB: 5VDC @ 1000mA
Weight	186g

	CAT.	Qty 1+	Qty 2+	Qty 4+
Four Channel	MB-3701	\$39.95	\$35.95	\$31.95

### UNIVERSAL LI-ION/NI-CD/NI-MH BATTERY CHARGER

This cleverly designed model charges various Li-ion battery packs, as well as AA, AAA or 9V Ni-MH and Ni-Cd rechargeable batteries. Housed with a spring loaded cover for clamping down batteries, two Delta-V controlled single cell channel and two adjustable contact pins which are polarity sensing for that added convenience. A USB port on the side accommodates the charging needs for your iPhone®, Smart phone or any USB power device. Topped off with an LCD for displaying the battery type, voltage and charge status. Perfect for digital camera, cordless phone and MP3 player batteries. The charger is supplied with both mains and car adaptors.

- Suitable for: 1 x 3.6V or 7.2V Li-ion battery packs  
1-2 x AA/AAA Ni-MH or Ni-Cd batteries  
1 x 9V Ni-MH
- USB output: 5VDC, 500mA
- Dimensions: 120(L) x 62(W) x 35(H)mm



Note: iPhone®, charging cable and batteries not included

	CAT.	Qty 1+	Qty 2+	Qty 4+
	MB-3639	\$44.95	\$40.45	\$35.95

## BATTERY CHARGERS (CONTINUED)

### LI-ION CR123A BATTERY CHARGER

CR123A batteries are commonly used in some LED torches and many cameras but the replacements are expensive. Now there's a rechargeable option with this lithiumion CR123A battery & matching charger. Normally, Li-ion batteries have a nominal voltage of 3.7V, which being higher than a normal CR123 battery can damage the sensitive circuitry of LED torches and cameras - but this battery is different! The battery features smart circuitry inside that drops the voltage to 3.0V under load, making it perfectly safe to use with sensitive electronics that normally use a 3.0V CR123 battery. The intelligent design will fully recharge the included battery in about 3 hours and shows an LED charge status indicator.

- Automatic charge control
- Short circuit & over voltage protection
- Supplied with mains plugpack and car charging cable
- Smart battery technology keeps nominal voltage to 3.0V
- Replacement CR123A 650mAh battery

Cat. SB-2411 sold separately.

#### Battery Included

SPECIFICATIONS	MB-3581
Battery Voltage	3VDC
Charge Time	3 hours
Charger Input	12VDC
Dimensions	90(L) x 40(W) x 25(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
CR123A Charger with Battery	MB-3581	\$39.95	\$35.95	\$31.95
CR123A Battery	SB-2411	\$14.95	\$13.45	\$11.95

### UNIVERSAL COMPACT BALANCE CHARGER

Balance charging provides greater control over the cells being recharged to help promote longevity and prevent overheating. This economic and high quality charger is capable of balance charging 2-4 cells (LiPo/LiFe/LiHV) or 6-8 cells (Ni-MH) batteries. Users can operate from one of selectable 1/2/3/4-amp modes for charging suitable battery capacities. Unit is mains powered.

- Suitable for LiPo/LiFe/LiHV/NiMH batteries
- Adjustable current: 1A/2A/3A/4A
- Short circuit & reverse polarity protection

SPECIFICATIONS	MB-3629
AC Input	100-240V
Battery Type	LiPo/LiFe/LiHV/NiMH
Lithium Battery Cell Count	2-4 cells
NiMH Battery Cell Count	6-8 cells
Charge Current	1A/2A/3A/4A
Charge Power	50W
Current Drain for Balancing	300mA
Dimensions	72(W) x 111(D) x 40(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
Universal Balance Charger	MB-3629	\$59.95	\$53.95	\$47.95

### UNIVERSAL PROFESSIONAL BALANCE CHARGER/DISCHARGER

Balance charging is the ultimate way to monitor individual cells in battery packs, providing more accurate charging, improving the life of your battery packs. The charger includes PC connectivity and temperature sensing, in addition to the large LCD and pushbutton controls. Suitable for Li-Po, Li-Fe, Li-ion lithium packs, as well as NiMH/NiCd packs. An integrated discharge function can also perform as an auto charge/discharge cycle to help condition your batteries (especially useful for NiCd packs). It truly provides some of the most advanced charging around for multi-cell battery packs with balance charging capability.

- Memory to save 10 charge/discharge profiles
- Suitable for LiPo/LiFe/Li-ion (1-6 cell), Ni-MH/Ni-Cd (1-15 cell) & Pb (2-20V) batteries

SPECIFICATIONS	MB-3633
AC Input	100-240VDC
Input	11-18V
Max Charge Power	50W
Max Discharge Power	5W
Charge Current Range	0.1-6A
Discharge Current Range	0.1-2A
Cell Count	LiPo/LiFe/Li-ion: 1-6 cells NiCd/NiMH: 1-15 cells
Pb (Lead) Battery Voltage	2-20V
Dimensions	138(W) X 144 (D) X 36 (H)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
Universal Balance Charger	MB-3633	\$99.95	\$89.95	\$79.95

## BATTERY TESTERS & HOLDERS

### BATTERY / BULB / FUSE TESTER

Battery tester with fuse and bulb checker. Tests AAA, AA, C, D (1.5V) & 9V batteries on the easy-to-read, colour-coded analogue display. It checks bulbs and fuses, giving a 'good' or 'replace' indication, and will also test larger 1.5V button batteries like the LR-44. There is also a handy compartment to store spare fuses, bulbs and button cells.

- Very accurate
- Dimensions: 150mm long
- Uses 9V Battery (included)

If you are a serious battery user you would be crazy not to own one of these. Kids are notorious for throwing good batteries in the bin!



	CAT.	Qty 1+	Qty 4+	Qty 10+
	QP-2252	\$13.95	\$12.35	\$10.95

### ALL IN ONE BATTERY TESTER

Here's a modern day battery tester to suit all your needs. This handy unit will test all types of batteries currently out there on the market including standard AA/AAA/C/D/9V batteries, button cells and lithium batteries such as those used in digital cameras. The LCD indicates the level of capacity so you'll never get caught out on a day trip with 1/2 flat batteries in your digital camera.

- One product to test all those batteries in your kitchen drawer before use!

Note: Batteries not included.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	QP-2253	\$23.95	\$21.35	\$18.95

### UNIVERSAL BATTERY TESTER

Never trash a good battery again! This universal tester provides testing for most types of small rechargeable batteries, including a huge range of Lithium-based (LiFePo4, Li-ion etc) batteries. You can test voltage, capacity, and internal resistance. Internal resistance is usually tied to the current charge level, however generally increases with a battery's age, it provides a good indication of battery health, most notably in Lithium-based rechargeable batteries. It also works with alkaline and various other non-rechargeable batteries.

- Tests over 11 types of batteries including cylindrical and button cells
- Test battery voltage, capacity (%), and internal resistance

See website for full list of compatible batteries.



	CAT.	Qty 1+	Qty 2+	Qty 4+
	QP-2260	\$39.95	\$35.95	\$31.95

### BATTERY ORGANISER WITH TESTER

Batteries are too expensive to waste and this well-designed organiser is an easy way to make the most of them. Hanging on a wall or flat in a drawer it holds 8 x D, 10 x C, 25 x AA, 10 x AAA and 8 x 9V batteries and you can store button batteries in the little drawer. There's even a removable tester so you can be sure each one is ready to use.

- 290(L) x 150(W) x 35(D)mm

Note: Batteries not included



	CAT.	Qty 1+	Qty 4+	Qty 10+
	QP-2312	\$16.95	\$15.25	\$13.55

### 4 X AA BATTERY CONTAINER PACK OF 2

Handy battery containers to store your AA batteries. Perfect for every digital camera owner who should have a spare set of batteries, charged and ready to go. Each container holds up to 4 x AA batteries and measure only 65mm wide, easily fitting in the pocket, purse or camera bag.

- One red and one blue supplied.



	CAT.	Qty 1+	Qty 4+	Qty 10+
	HB-6359	\$4.45	\$3.95	\$3.45



## Nickel Metal Hydride Ni-MH Rechargeable Batteries:

Powerful rechargeable batteries with massive capacity for your power-hungry devices. Two types are available. Nipple cap, which are like your standard Alkaline batteries in style, and solder tabs, which are perfect for DIY projects due to their ease of installation and solder connection. If you've ever tried to solder to a regular Nipple Cap type cell, you'll know how tough and unreliable the connection can be.

Ni-MH suffers no memory effect as Ni-Cd does, with huge capacities available in a range of standard sizes.

*\*Supplied in Blister Packs*



SIZE	CURRENT CAPACITY MAH	V	PER	CHARGING RATE SLOW - 15 HOURS	CHARGING RATE STANDARD - 5 HOURS	CHARGING RATE FAST - 1.5 HOURS	TERMINAL TYPE	CAT.	Qty 1+	Qty 8+	Qty 15+
AAA	900	1.2	EA	90	270	900	Nipple	SB-1723	\$2.95	\$2.60	\$2.30
AAA	900	1.2	EA	90	270	900	Solder tabs	SB-1724	\$3.95	\$3.45	\$3.15
AA	2000	1.2	EA	200	650	2000	Nipple	SB-1706	\$4.95	\$4.45	\$3.95
AA	2000	1.2	EA	200	650	2000	Solder tabs	SB-1708	\$5.45	\$4.90	\$4.35
AA	2400	1.2	EA	240	750	2400	Solder tabs	SB-1728	\$5.95	\$5.35	\$4.75
AA	2500	1.2	EA	260	800	2500	Nipple	SB-1744	\$5.95	\$5.35	\$4.75
AAA	900	1.2	Pkt 4*	90	270	900	Nipple	SB-1739	\$10.95	\$9.45	\$8.45
AA	2000	1.2	Pkt 4*	200	650	2000	Nipple	SB-1737	\$17.95	\$15.95	\$13.95
AA	2500	1.2	Pkt 4*	260	800	2500	Nipple	SB-1738	\$22.95	\$20.45	\$17.95

SIZE	CURRENT CAPACITY MAH	V	PER	CHARGING RATE SLOW - 15 HOURS	CHARGING RATE STANDARD - 5 HOURS	CHARGING RATE FAST - 1.5 HOURS	TERMINAL TYPE	CAT.	Qty 1+	Qty 8+	Qty 15+
SUB C	3300	1.2	EA	350	670	3300	Solder tabs	SB-1611	\$9.95	\$8.95	\$7.95
D	9000	1.2	Pkt 2*	900	3000	9000	Nipple	SB-1734	\$49.95	\$44.95	\$39.95
SUB C	24001	1.2	EA	240	740	2400	Solder tabs	SB-1617	\$7.95	\$7.15	\$6.35
9V	200	8.4	EA	20mA	60mA		Clip	SB-2467	\$13.95	\$12.55	\$11.15
C	3000 NEW	1.2	Pkt 2*	450	1500	3000	Nipple	SB-1736	\$17.95	\$15.95	\$13.95

Note: SB-1617 high power battery with peak pulse discharge up to 30A and constant current discharge to 15A.

### PANASONIC ENELOOP NI-MH PRE-CHARGED RECHARGEABLE BATTERIES

This range of Panasonic Eneloop batteries have numerous advantages over regular rechargeables. Key characteristics include low self-discharge, they are pre-charged so can be used right out of the packet, and can be recharged up to 1800 times. After 5 years of storage they will retain 70% of their capacity once fully charged. A far more environmentally friendly option than churning through dozens of alkalines.

**PANASONIC ENELOOP NI-MH 1.2V 2000MAH - AA 2 PACK**  
SB-2930

**PANASONIC ENELOOP NI-MH 1.2V 2000MAH - AA 4 PACK**  
SB-2931

**PANASONIC ENELOOP NI-MH 1.2V 800MAH - AAA 2 PACK**  
SB-2932

**PANASONIC ENELOOP NI-MH 1.2V 800MAH - AAA 4 PACK**  
SB-2933



### PANASONIC XX HIGH CAPACITY ENELOOP NI-MH 1.2V - 4 PACKS

For even more demanding applications the Panasonic XX High Capacity range are perfect. They provide a massive 2500mAh capacity (AA size), can be recharged 500 times, and will retain 75% of their capacity after a year in storage. They can also be used in sub-zero temperatures (-20°C) without issue. The high capacity allows you to take up to 5x more pictures with your digital camera.

**900MAH - AAA 4 PACK**  
SB-2938

**2500MAH - AA 4 PACK**  
SB-2936



See page 373 for an Eneloop Battery Charger

		CAT.	Qty 1+
AA 2000mAh	Pack 2	SB-2930	\$15.95
AA 2000mAh	Pack 4	SB-2931	\$27.95
AAA 800mAh	Pack 2	SB-2932	\$15.95
AAA 800mAh	Pack 4	SB-2933	\$27.95

		CAT.	Qty 1+
AAA 900mAh	Pack 4	SB-2938	\$30.95
AA 2500mAh	Pack 4	SB-2936	\$30.95

### Smart Hardware Competition:

- BRETT HOPSON, SHOPS AT JAYCAR MAITLAND

"I design this 3D printed "Vertical blind controller"

It uses modified servo motor and a ESP8266.

It connects to a Raspberry pi via Wifi and is

controlled by Home-assistant using

MQTT commands. you can see my

youtube video for more

[https://www.youtube.com/](https://www.youtube.com/watch?v=FG65AO9D8U0)

[watch?v=FG65AO9D8U0](https://www.youtube.com/watch?v=FG65AO9D8U0)"



**WINNER**





## SPECIALTY RECHARGEABLE BATTERIES

### USB RECHARGEABLE BATTERIES

These batteries simply plug into any powered USB port to be recharged. They're a brilliant idea for battery operated PC input devices such as a mouse or keyboard.

• 1.2V



	PACK	CAT.	Qty 1+
AAA	2	400mAh	SB-1757 \$9.95
AA	2	1200mAh	SB-1756 \$14.95

### NI-CD RECHARGEABLE BATTERY SUB C

SPECIFICATIONS	SB-2468
Size	SUB C
Current Capacity	1800mAh
Voltage	1.2V
Charging Rate Standard	180mA for 14-16 hours
Charging Rate Fast 4-5 Hours	600mA
Terminal Type	Solder tabs



Note 1: At 20°C

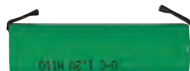
Note 2: Similar to batteries used in the Braun electric toothbrush (2 required).

TYPE	CAT.	Qty 1+	Qty 8+	Qty 15+
Sub C	1800mAh	SB-2468 \$7.95	\$7.15	\$6.35

### LONG LIFE PRE-CHARGED RECHARGEABLE BATTERIES - 1.2V

Features ultra-low self-discharge technology so they can be used immediately after purchase. It retains 85% of initial capacity after 1 year of storage, are environmentally friendly and ideal for the most demanding of modern digital devices.

**WILL STAY CHARGED EVEN WHEN STORED FOR LONG PERIODS**



TYPE	CAT.	Qty 1+	Qty 8+	Qty 15+
AA	Single - 2000mAh Solder Tags	SB-1751 \$5.95	\$5.35	\$4.75

### HIGH DISCHARGE 3300MAH NI-MH SUB C BATTERY

Replacement for Ni-Cd batteries in power tools and other battery packs. This high discharge Sub C can discharge at over 40A making it clearly superior to the old Ni-Cd technology, effectively making it obsolete. Supplied fitted with quality solder tabs to make into battery packs either as replacements for Ni-Cd batteries or for new projects.



TYPE	CAT.	Qty 1+	Qty 8+	Qty 15+
Sub C	3300mAh	SB-1611 \$9.95	\$8.95	\$7.95

### 7.2V 3300MAH NI-MH RC BATTERY

High capacity, high current discharge Ni-MH pack for radio control cars. Fitted with standard "Tamiya" type plug.



TYPE	CAT.	Qty 1+	Qty 8+	Qty 15+
6 x Sub C 3300mAh	SB-2314	\$59.95	\$53.95	\$47.95

## CORDLESS PHONE BATTERIES

### TELEPHONE BATTERIES TO SUIT UNIDEN PHONES

A collection of replacement batteries suitable for Uniden cordless phones. All are heat shrink wrapped with suitable connectors so it's a simple drop in replacement.

#### 2.4V 800MAH NI-MH - 80AAM2BMS

SB-1651

#### 2.4V 650MAH NI-MH CTB97 - 65AAAH2BMS

Suits Uniden models: BT-652, BT652, CTB97

SB-1653

#### 2.4V 650MAH NI-MH CTB96 - 65AAAH2BMJ

SB-1654



	CAT.	Qty 1+	Qty 10+	Qty 20+
80AAM2BMS	2.4V / 800mAh	SB-1651 \$18.95	\$17.05	\$15.15
65AAAH2BMS	2.4V / 650mAh	SB-1653 \$18.95	\$17.05	\$15.15
65AAAH2BMJ	2.4V / 650mAh	SB-1654 \$18.95	\$17.05	\$15.15

See our range of Cordless Phones on page 327

### CORDLESS TELEPHONE BATTERIES - EXTENDED RANGE

Replacement batteries for cordless telephones.

#### 3.6V 600MAH NI-MH

- Nominal voltage 3.6V
- Nominal capacity 600mAh
- Bank of three batteries next to each other
- Dimensions: 30(H) x 14(W) x 41(L)mm
- Supplied with lead and two pin Mitsumi plug.
- Suits Panasonic KXT3716, 3806, 3826, 4026, 4027, 4036, 4046, 4047, 4300 & 4317
- Uniden CT301, XC360, XC310, XC320, XC340, XC610
- Also suits various Sony & James Hardie phones.



CAT.	Qty 1+	Qty 10+	Qty 20+
SB-1645	\$12.95	\$11.35	\$10.35

#### 3.6V 650MAH NI-MH

- Nominal voltage: 3.6V
- Suitable for Panasonic KXTC1220/KXTC1230
- GP Battery No. GP65AAAH3BMS

CAT.	Qty 1+	Qty 10+	Qty 20+
SB-1646	\$17.95	\$16.15	\$14.35



#### 3.6V 1000MAH NI-CD

- Nominal voltage: 3.6V
- Suitable for Panasonic KX-TC1801 - KT-TC1890
- GP Battery No. GP100AAS3BMS

CAT.	Qty 1+	Qty 10+	Qty 20+
SB-1648	\$18.95	\$17.05	\$15.15



#### 3.6V 850MAH NI-MH

- Nominal voltage 3.6V
- Suitable for Uniden WDECT2315 - WDECT2310, DSS5805, 5855, 5865
- GP battery No. GP85AAALH3BMS

CAT.	Qty 1+	Qty 10+	Qty 20+
SB-1634	\$29.95	\$26.95	\$23.95



## Smart Hardware Competition: - ADAM SAMROUT, SHOPS AT JAYCAR BANKSTOWN

"Pictured here is a 240v 15a PID heat controller with K type thermocouple socket on the front of the enclosure and a 12v 80mm ball bearing fan from none other than Jaycar Bankstown my fav place in town!"





## Li-ion Rechargeable Batteries:

Lithium technology has enabled huge portable power with minimal weight, critical for modern portable electronics. A range of nipple cap and solder tab batteries in varying capacities, allow you to select what you require for size, capacity, and budget.

### 14500 800MAH 3.7V NIPPLE

• Dimensions: 50(L) x 14(Dia.)mm  
SB-2300

### 18650 2,600MAH 3.7V NIPPLE

• Dimensions: 65(L) x 18(Dia.)mm  
SB-2308

### 26650 3,400MAH 3.7V NIPPLE

• Dimensions: 65(L) x 26(Dia.)mm  
SB-2315

### 14500 800MAH 3.7V SOLDER TAG

• Dimensions: 50(L) x 14(Dia.)mm  
SB-2301

### 18650 2,600MAH 3.7V SOLDER TAG

• Dimensions: 65(L) x 18(Dia.)mm  
SB-2313

### 26650 3,400MAH 3.7V SOLDER TAG

• Dimensions: 65(L) x 26(Dia.)mm  
SB-2319



TYPE				CAT.	Qty 1+	Qty 8+	Qty 15+
14500	800mAh	3.7V	Nipple	SB-2300	\$9.95	\$8.95	\$7.95
14500	800mAh	3.7V	Solder	SB-2301	\$10.95	\$9.85	\$8.75
18650	2600mAh	3.7V	Nipple	SB-2308	\$15.95	\$13.95	\$12.45
18650	2600mAh	3.7V	Solder	SB-2313	\$17.95	\$15.95	\$13.95
26650	3400mAh	3.7V	Nipple	SB-2315	\$19.95	\$17.95	\$15.95
26650	3400mAh	3.7V	Solder	SB-2319	\$21.95	\$19.45	\$17.45

## LIFEPO4 RECHARGEABLE BATTERIES

### LIFEPO4 RECHARGEABLE BATTERIES

Lithium iron phosphate (LiFePO4) is a more chemically stable type of lithium rechargeable cell that is becoming increasingly popular, due to the increased safety and longer cycle life over traditional Li-ion cells. They have a slightly lower capacity and nominal voltage than equivalent Li-ion cells, but can be charged/discharged around 2000 times (versus 500-1000 for Li-ion), and can deliver higher peak currents. We now offer a couple of common sizes:

### 14500 3.2V 600MAH LIFEPO4

• Capacity: 600mAh  
• Dimensions: 14(diam) x 50(L)mm SB-2305

### 18650 3.2V 1600MAH LIFEPO4

• Capacity: 1600mAh  
• Dimensions: 18(diam) x 69(L)mm SB-2307

### 26650 3.2V 3000MAH LIFEPO4

• Capacity: 3000mAh  
• Dimensions: 68(L) x 21(Dia.)mm SB-2317



TYPE				CAT.	Qty 1+	Qty 8+	Qty 15+
14500	600mAh	3.2V		SB-2305	\$11.95	\$10.45	\$9.45
18650	1600mAh	3.2V		SB-2307	\$19.95	\$17.95	\$15.95
26650	3000mAh	3.2V		SB-2317	\$23.95	\$21.45	\$18.95

## 3.7V 18650 PROTECTED 2600MAH LI-ION RECHARGEABLE BATTERY

A powerful battery for many uses. Fully protected against over-charge, over-discharge, short-circuit, and over-current to keep the battery in good shape and devices safe. Provides critical protection for hobby and DIY projects.

- Light weight Li-ion
- More than 500 charge-discharge cycles

SPECIFICATIONS	SB-2299
Battery Size	18650
Capacity	3.7V 2600mAh
Discharge Current	3.5A Maximum
Cut-Off Voltage	Charging: 4.2V Discharging: 2.75V
Dimensions	18.5(Dia.) x 69.5(H)mm
Weight	48g



	CAT.	Qty 1+	Qty 10	Qty 20
18650 Protected 2600mAh Nipple	SB-2299	\$19.95	\$17.95	\$15.95

## Tech Talk: Protected vs Unprotected Li-Ion Batteries

With great power comes great responsibility. For the ultimate in protection, our SB-2299 protected Li-ion battery provides safety while offering huge power. It's a great choice for novices, schools, and younger experimenters, or when you just want that added safety and piece of mind.

## 3.7V 18650 USB RECHARGEABLE LI-PO BATTERY

No external charger required, just a USB port. Simply flip-off the cap and plug it in to recharge! No cables, charger, or other fuss required.

SPECIFICATIONS	SB-2309
Voltage	3.7V
Current	1A
Capacity	1200mAh
Dimensions	63(H) x 19(Dia.)mm



		CAT.	Qty 1+	Qty 10+	Qty 20+
18650	1200mAh	SB-2309	\$24.95	\$22.45	\$19.95

## RECHARGEABLE 3V CR123A - LI-ION

Rechargeable CR123A  
650mAh battery

- Use charger MB-3581

See our charger to suit  
on page 375



TYPE		CAT.	Qty 1+	Qty 10+	Qty 20+
CR123A	650mAh	SB-2411	\$14.95	\$13.45	\$11.95

## 3.7V 16340 RCR123A RECHARGEABLE LITHIUM 4 PACK

New rechargeable RCR123A Lithium ion batteries designed specifically to work with compatible\* security cameras (Uniden, Arlo etc.), flashlights, digital cameras, camcorders, electronic toys, alarm systems and more! They have a 700mAh (16% more than average RCR123A) capacity and can be recharged 500 times with no memory effect. Sold as pack of 4.

Recharge with a compatible Li-ion charger suited for RCR123A / 16340 batteries.

- Use charger MB-3581
- Dimensions: 16.8(Dia.) x 33.5(H)mm

Note: RCR123A Li-ion rechargeable batteries are a replacement for standard CR123A batteries in many applications but NOT ALL. These are rated 3.7V, not 3V as is a standard CR123A.

Always check the manufacturer label or user manual prior to using these batteries. Charge prior to first use. Do not mix non-rechargeable and rechargeable batteries in the device.



See website for full specifications.

	CAT.	Qty 1+	Qty 10+	Qty 20+
	SB-2294	\$29.95	\$26.95	\$23.95

## Tech Talk: LiFePO4

Lithium iron phosphate (LiFePO4) is a technology proving to overcome the safety concerns that exist with Lithium ION (Li-ION) and other lithium battery technologies because it is chemically more stable. In particular, LiFePO4 is able to deliver extremely high surge currents without risk of the battery chemistry breaking down (and the battery exploding), holds a charge for a very long time, and is far more stable when exposed to high heat and other environmental conditions.



## BATTERY HOLDERS - AAA SIZE

The holders are moulded in Delrin with corrosive resistant nickel plated springs & studs. All have connection wires 150mm long, unless marked.

We can supply OEM quantities of holders with special configurations.

1 X AAA	1 X AAA PCB MOUNT	2 X AAA CELL	2 X AAA PCB MOUNT	2 X AAA SWITCHED BATTERY ENCLOSURE	4 X AAA SIDE BY SIDE	4 X AAA PCB MOUNT	4 X AAA SWITCHED BATTERY ENCLOSURE
							
PH-9260	PH-9261	PH-9226	PH-9264	PH-9288	PH-9268	PH-9270	PH-9285










  

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
1 x AAA	PH-9260	\$1.10	\$0.95	\$0.85
1 x AAA PCB Mount	PH-9261	\$1.35	\$1.20	\$1.05
2 x AAA Cell	PH-9226	\$1.45	\$1.30	\$1.15
2 x AAA PCB Mount	PH-9264	\$1.45	\$1.30	\$1.15

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
2 x AAA Switched Battery Enclosure	PH-9288	\$2.75	\$2.45	\$2.20
4 x AAA Side by Side	PH-9268	\$2.45	\$2.15	\$1.95
4 x AAA PCB Mount	PH-9270	\$2.45	\$2.15	\$1.95
4 x AAA Switched Battery Enclosure	PH-9285	\$3.50	\$3.15	\$2.80

## AA SIZE

<b>1 X AA</b> PH-9203	
<b>2 X AA SIDE BY SIDE</b> PH-9202	
<b>2 X AA SWITCHED BATTERY ENCLOSURE</b> PH-9280	
<b>4 X AA SQUARE</b> PH-9200	
<b>4 X AA SIDE BY SIDE &amp; END TO END</b> PH-9204	
<b>4 X AA SWITCHED BATTERY ENCLOSURE</b> PH-9282	
<b>6 X AA 2 BY 3 SIDE BY SIDE</b> PH-9206	
<b>8 X AA 2 ROWS OF 4 SQUARE</b> PH-9209	
<b>10 X AA SIDE BY SIDE</b> PH-9210	

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
1 x AA	PH-9203	\$1.10	\$0.95	\$0.85
2 x AA Side by Side	PH-9202	\$1.25	\$1.10	\$1.00
2 x AA Switched Battery Enclosure	PH-9280	\$3.35	\$3.00	\$2.65
4 x AA Square	PH-9200	\$1.95	\$1.75	\$1.55
4 x AA Side by Side & End to End	PH-9204	\$1.65	\$1.45	\$1.30
4 x AA Switched Battery Enclosure	PH-9282	\$3.75	\$3.35	\$3.00
6 x AA 2 by 3 Side by Side	PH-9206	\$2.35	\$2.10	\$1.85
8 x AA 2 Rows of 4 Square	PH-9209	\$2.75	\$2.45	\$2.20
10 x AA Side by Side	PH-9210	\$4.75	\$4.25	\$3.80




## C SIZE

<b>1 X C CELL</b> PH-9212	
<b>4 X C CELL 2 ROWS OF 2 END TO END</b> PH-9216	

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
1 x C Cell	PH-9212	\$1.95	\$1.75	\$1.55
4 x C Cell 2 Rows of 2 End to End	PH-9216	\$2.95	\$2.65	\$2.35




## D SIZE

<b>1 X D CELL</b> PH-9218	
<b>2 X D CELL SIDE BY SIDE</b> PH-9220	
<b>4 X D CELL 2 ROWS OF 2</b> PH-9222	

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
1 x D Cell	PH-9218	\$1.75	\$1.55	\$1.40
2 x D Cell Side by Side	PH-9220	\$2.45	\$2.15	\$1.95
4 x D Cell 2 Rows of 2	PH-9222	\$2.95	\$2.60	\$2.30

## 9V SIZE

<b>PCB MOUNT 9V</b> PH-9235	
<b>9V HOLDER</b> PH-9237	
<b>STANDARD 9V SNAP-ON</b> PH-9230	
<b>QUALITY 9V BATTERY CLIP</b> PH-9232	
<b>BEST QUALITY "SAFETY" 9V BATTERY CLIP</b> PH-9233	
<b>BEST QUALITY "T" SAFETY 9V BATTERY CLIP</b> PH-9234	

TYPE	CAT.	Qty 1+	Qty 10+	Qty 25+
PCB Mount 9V	PH-9235	\$1.25	\$1.10	\$1.00
9V Holder	PH-9237	\$0.95	\$0.86	\$0.76
Standard 9V Snap-On	PH-9230	\$0.75	\$0.68	\$0.60
Quality 9V Battery Clip	PH-9232	\$0.95	\$0.86	\$0.76
Best Quality "Safety" 9V Clip	PH-9233	\$1.30	\$1.15	\$1.00
Best Quality "T" Safety 9V Clip	PH-9234	\$1.30	\$1.15	\$1.00

## 9V BATTERY SNAP DC LEAD 2.1MM PLUG 0.3M

This is a 9V Battery snap to centre positive 2.1mm DC connector lead. Use this cable to battery power any device that needs 9V and has an on-board barrel jack. Works great for Arduinos, development boards, electronic projects, LED lighting and more!

SPECIFICATIONS	PH-9251
Cable Length	0.3m
Battery Type	9V
Plug Type	5.5X2.1mm DC

CAT.	Qty 1+	Qty 10+	Qty 50+
PH-9251	\$4.95	\$4.45	\$3.95

## BATTERY CONTAINERS & HOLDERS (CONTINUED)

### 3 X AAA BATTERY HOLDER FOR LED LIGHTS

Round battery holder that holds 3 x AAA batteries. Suits LED torches and bike lights, including ST-3465, ST-3456 and ST-3475. Have a few handy, loaded with batteries (available separately), if you're going long distance.

- Dimensions: 53.5(L) x 22.3(Dia)mm (without batteries)



CAT.	Qty 1+	Qty 10+	Qty 25+
PH-9221	\$1.55	\$1.35	\$1.20

### 18650 BATTERY HOLDERS WITH 150MM LEAD

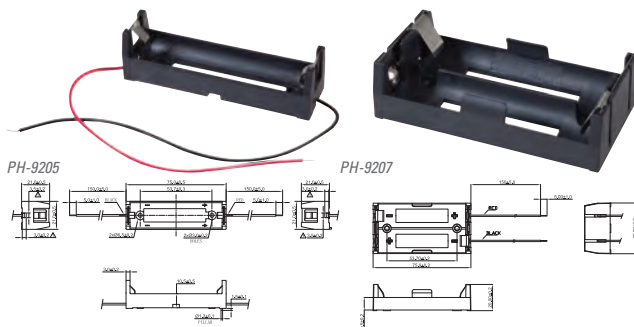
Ideal for Arduino® projects or any on-board power storage applications. Includes 150mm leads so it is suitable for case mounting too.

#### PH-9205 SINGLE:

- Dimensions: 75(W) x 22(D) x 20(H)mm

#### PH-9207 DOUBLE

- Dimensions: 75(W) x 39(D) x 20(H)mm



	CAT.	Qty 1+	Qty 10+	Qty 25+
1 x 18650	PH-9205	\$2.95	\$2.65	\$2.35
2 x 18650	PH-9207	\$4.95	\$4.45	\$3.95

### 4 X AA SWITCHED BATTERY ENCLOSURE WITH 2.1MM DC PLUG

- High quality ABS holder with on/off switch and sliding cover
- Includes 150mm lead 2.1mm DC Plug (centre positive)
- Dimensions: 68(L) x 65(W) x 19(H)mm

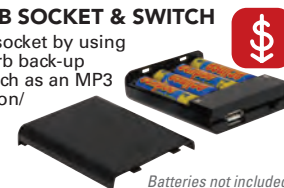


CAT.	Qty 1+	Qty 10+	Qty 25+
PH-9283	\$5.95	\$5.50	\$4.75

### BATTERY BANK 4 X AA WITH USB SOCKET & SWITCH

Provides 5VDC power through the USB socket by using 4 x AA batteries. The unit makes a superb back-up charger for any USB powered device such as an MP3 player or PDA and also features a slide on/off switch.

- Dimensions: 15(H) x 63(W) x 80(D)mm



Note: Output is not regulated.

Batteries not included.

CAT.	Qty 1+	Qty 10+	Qty 25+
MP-3083	\$4.95	\$4.45	\$3.95

### 4 X AA WATERPROOF BATTERY ENCLOSURE

Simply add your own AA batteries and you have a 6V power source to power your gadgets when mains power is not available. It is water and dustproof, so it can be used outdoors, which could include powering outdoor weather sensors, tank level meters, door entry buzzers, decorative LED lighting, etc.

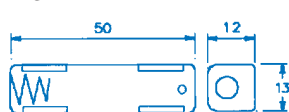
- High impact resistant ABS enclosure with a nylon cable gland
- Rated IP68 to provide protection against oil, dust and water
- Enclosure is secured by brass nuts moulded in the interior of the base with 4 x supplied self tapping screws
- Includes 150mm long tinned leads
- Dimensions: 79(L) x 67(W) x 23(H)mm



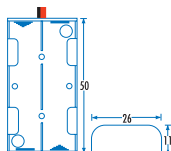
CAT.	Qty 1+	Qty 10+	Qty 25+
PH-9281	\$9.95	\$8.95	\$7.95

## BATTERY CONTAINERS & HOLDERS LINE DRAWINGS

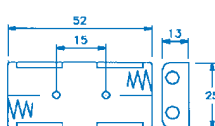
### AAA SIZE



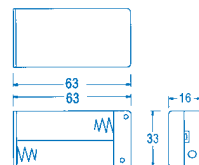
PH-9260 & PH-9261



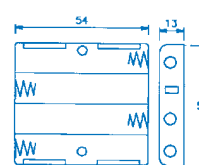
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PH-9264

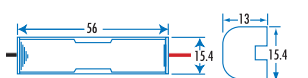


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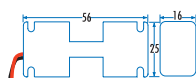


PH-9268 & PH-9270

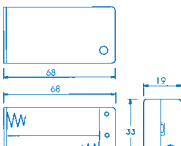
### AA SIZE



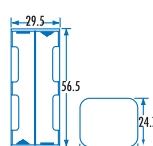
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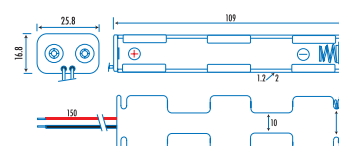
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PH-9280

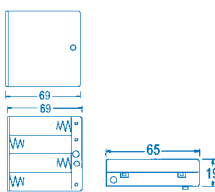


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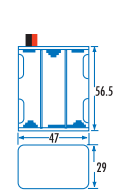


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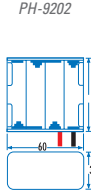
### C SIZE



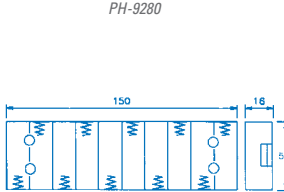
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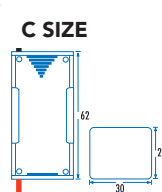
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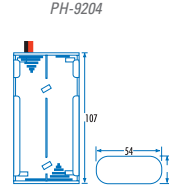
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PH-9210

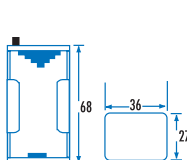


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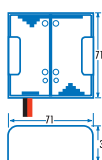


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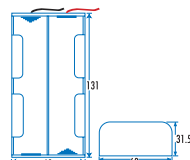
### D SIZE



PH-9218

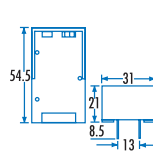


PH-9220

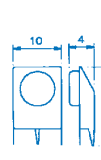


PH-9222

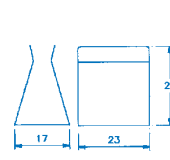
### 9V SIZE



PH-9235



PH-9239



PH-9237

## ▼ BUTTON CELL BATTERIES

### 1.5V SILVER OXIDE BATTERIES

These batteries generally have a protective layer of silicon on them. Please wipe with a cloth and avoid touching with fingers before installing them.



TYPE#	CAPACITY	EVEREADY	VINNIC	MAXELL	IEC	OTHER	PK	DIA X H(MM)	CAT.	Qty 1+	Qty 8+	Qty 15+
357	15mAh	357	S1154E	SR44W	SR44	613/RW12/32/S1154S	ea	11.6 x 5.4	SB-2512	\$1.95	\$1.75	\$1.55
362	21mAh	362	S721E	S721SW	SR58	SG11/SR720/532/19/RW310	ea	7.9 x 2.1	SB-2530	\$1.95	\$1.75	\$1.55
364	20mAh	364	S621E	S621SW	SR60	SG1/SR620/531/31/RW320	ea	6.8 x 2.1	SB-2501	\$1.95	\$1.75	\$1.55
371	44mAh	-	-	SR920SW	SR69	SG6/537/30/RW315	ea	9.5 x 2.1	SB-2534	\$1.95	\$1.75	\$1.55
377	27mAh	-	-	SR626SW	SR66	SG4/37	ea	6.8 x 2.6	SB-2504	\$1.95	\$1.75	\$1.55
389	60mAh	-	-	SR1130SW	SR54	RW49/AG10/G10/SG10/554/390	ea	11.6 x 3.05	SB-2508	\$1.95	\$1.75	\$1.55
391	40mAh	-	-	SR1121W	SR55	SG8/68/553/28/RW40	ea	11.6 x 2.1	SB-2542	\$1.95	\$1.75	\$1.55
392	38mAh	-	-	SR41W	SR41	SG3/63/547/2/RW27/RW47	ea	7.9 x 3.6	SB-2502	\$1.95	\$1.75	\$1.55
393	65mAh	-	-	SR754W	SR48	SG5/65/546/15/RW28/RW48	ea	7.9 x 5.4	SB-2532	\$1.95	\$1.75	\$1.55
396	25mAh	-	-	SR726W	SR59	SG2/556/29/RW411	ea	7.9 x 2.6	SB-2510	\$1.95	\$1.75	\$1.55
399	42mAh	-	-	SR927W	SR57	SG7/SR926/543/35/RW413	ea	9.5 x 2.7	SB-2536	\$1.95	\$1.75	\$1.55

### 1.5V ALKALINE BATTERIES



TYPE#	#CAPACITY	EVEREADY	VINNIC	MAXELL	VARTA	OTHER	PK	DIA X H(MM)	CAT.	Qty 1+	Qty 8+	Qty 15+
LR936	45mAh	-	-	LR45	-	AG9	ea	9.5 x 3.6	SB-2513	\$1.50	\$1.35	\$1.20
LR43	90mAh	166	-	LR43	V12GA	-	ea	11.6 x 4.2	SB-2514	\$1.50	\$1.35	\$1.20
LR44	120mAh	A76	-	LR44	V13GA	357A	ea	11.6 x 5.4	SB-2516	\$1.50	\$1.35	\$1.20
LR44 (Panasonic)	120mAh	LR44	-	LR44	V13GA	357A	ea	11 x 5	SB-2950	\$3.95	\$3.55	\$3.15

### 3V LITHIUM

- Not rechargeable.



### BATTERIES



TYPE#	CAPACITY	PK.	DIA X H(MM)	CAT.	Qty 1+	Qty 8+	Qty 15+
CR1220	30mAh	ea	12 x 2.0	SB-2527	\$2.95	\$2.60	\$2.30
CR1616	45mAh	ea	16 x 1.5	SB-2525	\$2.95	\$2.60	\$2.30
CR1620	50mAh	ea	16 x 2.0	SB-2526	\$2.95	\$2.60	\$2.30
CR1632	150mAh	ea	16 x 3.2	SB-2529	\$2.95	\$2.60	\$2.30
CR2016	60mAh	ea	20 x 1.6	SB-2524	\$2.95	\$2.60	\$2.30
CR2025	110mAh	ea	20 x 2.5	SB-2520	\$2.95	\$2.60	\$2.30
CR2032	140mAh	ea	20 x 3.2	SB-2522	\$2.95	\$2.60	\$2.30
CR2450 Eclipse	575mAh	ea	25.5 x 5.0	SB-2946	\$4.95	\$4.45	\$3.95
CR2430	270mAh	ea	24.5 x 3.0	SB-2523	\$2.95	\$2.60	\$2.30

### 3V LITHIUM BATTERIES - PANASONIC

Not rechargeable

**Panasonic**



TYPE#	CAPACITY	PK.	DIA X H(MM)	CAT.	Qty 1+	Qty 10+	Qty 20+
CR2016	90mAh	ea	20 x 1.6	SB-2940	\$4.95	\$4.45	\$3.90
CR2025	165mAh	ea	20 x 2.5	SB-2942	\$4.95	\$4.45	\$3.90
CR2032	220mAh	ea	20 x 3.2	SB-2944	\$4.95	\$4.45	\$3.90

### HEARING AID REPLACEMENT BATTERY PACKS

Eclipse Hearing Aid batteries have a higher capacity than other batteries of same size offering maximum power while increasing life. High drain hearing aids tend to demand greater air flow. The air management system provides constant air flow throughout the Battery life. This allows battery to access accurate amount of air required, maximizing battery power without loss in performance. As a result, one has a high performance consistent hearing aid.

	CAT.	Qty 1+	Qty 8+	Qty 15
Hearing Aid A13 300mAh 6 pack	SB-2544	\$6.95	\$6.25	\$5.55
Hearing Aid A312 180mAh 6 pack	SB-2543	\$6.95	\$6.25	\$5.55
A675 630mAh 6 pack	SB-2545	\$6.95	\$6.25	\$5.55
A10 100mAh 6 pack	SB-2547	\$6.95	\$6.25	\$5.55

### STANDARD BUTTON CELL HOLDER

PCB mount holder, suits button cells, with diameter up to 20mm, which includes the 3V lithium batteries.

\*May vary slightly to one shown.

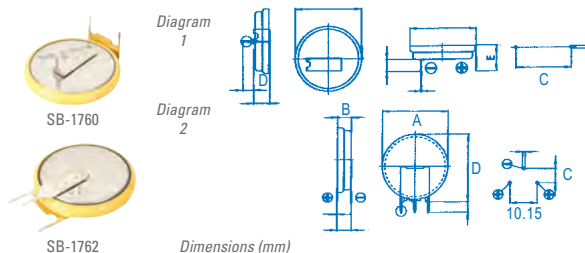


	CAT.	Qty 1+	Qty 10+	Qty 25+
	PH-9238	\$1.95	\$1.75	\$1.55

### 3V PCB MOUNTING LITHIUM COIN BATTERIES

Two of the most popular solder-in PCB mounting type batteries. All 3 volt.

Not rechargeable



CAPACITY	PART NO.	DIAG.	CAT.	A	B	C	D
200mAh	CR2032VC	2	SB-1762	20	3.2	3.5	21
400mAh	CR2430-HC-33	1	SB-1760	24.5	24.7	17.8	9.45
540mAh	CR2540NRH	2	SB-1622	24.5	24.5	17.8	11.35

PART NO.	CAPACITY	CAT.	Qty 1+	Qty 10+	Qty 20+
CR2430-HC-33	400mAh	SB-1760	\$3.95	\$3.45	\$3.15
CR2032VC	200mAh	SB-1762	\$2.45	\$2.15	\$1.95
CR2540NRH	540mAh	SB-1622	\$6.95	\$6.25	\$5.55

Supplied in a handy rotary wheel dispenser pack.

Tip: Caring for these batteries is important. When they are not in use, hearing aid batteries should be stored at room temperature. When you're not using your hearing aid, example, at night when sleeping, leave the battery compartment open so the battery doesn't drain and fresh air can dry the hearing aid and battery compartment.





## ALKALINE BATTERIES

### ECLIPSE ALKALINE BATTERIES

Eclipse batteries are made to the same specifications of those well known expensive brands advertised on TV, but at a realistic price. We are very, very proud of these products and stand behind them unconditionally. If you try them & are disappointed with them for any reason we will give you a full refund and another set of ECLIPSE batteries to see if you can work out what went wrong!



SB-2387 SB-2426 SB-2424 SB-2416 SB-2418 SB-2423

PACK	SIZE	CAT.	Qty 1+	Qty 10+	Qty 20+
2	AAAA NEW	SB-2387	\$1.95	\$1.75	\$1.55
2	AAA	SB-2426	\$1.75	\$1.55	\$1.40
4	AAA	SB-2413	\$2.95	\$2.65	\$2.35
12	AAA	SB-2334	\$6.95	\$6.25	\$5.55
24	AAA	SB-2331	\$10.95	\$9.45	\$8.45
40	AAA	SB-2328	\$14.95	\$13.45	\$11.95
2	AA	SB-2424	\$1.75	\$1.55	\$1.40
4	AA	SB-2425	\$2.95	\$2.65	\$2.35
12	AA	SB-2333	\$6.95	\$6.25	\$5.55
24	AA	SB-2329	\$10.95	\$9.45	\$8.45
40	AA	SB-2332	\$14.95	\$13.45	\$11.95
2	C	SB-2416	\$3.95	\$3.45	\$3.15
4	C	SB-2320	\$6.95	\$6.25	\$5.50
2	D	SB-2418	\$4.50	\$4.05	\$3.60
4	D	SB-2321	\$7.95	\$7.15	\$6.35
1	9V	SB-2423	\$3.95	\$3.45	\$3.15
6	9V	SB-2417	\$14.95	\$13.45	\$11.95

### PANASONIC ALKALINE BATTERIES

Panasonic® is not a name that you instantly associate with high performance batteries, but we have come to learn that in fact Panasonic® has been manufacturing batteries for many many years, providing OEM manufacturing and strong research and development for many of the big brands you know and recognise. But now have they decided to keep their latest technology for themselves, and manufacture under their own brand. These Panasonic® Evolta® batteries held an internationally recognised record for the longest lasting AA alkaline battery – until recently. If you don't believe us, test them for yourself, we are sure you will be impressed! Having said that, the prices are quite competitive, considering the outstanding performance of the Evolta® product. We are confident that with a name like Panasonic® you can be confident about quality! So if using brand-name batteries is important to you we would love you to try the Panasonic® Evolta® alkaline range.



SB-2910 SB-2900 SB-2912 SB-2914 SB-2916

TYPE	PACK	CAT.	Qty 1+
AAA	2	SB-2906	\$3.95
AAA	4	SB-2908	\$6.95
AAA	8	SB-2910	\$11.95
AA	2	SB-2900	\$3.95
AA	4	SB-2902	\$6.95
AA	8	SB-2904	\$11.45
AA	20	SB-2905	\$24.95
C	2	SB-2912	\$7.50
D	2	SB-2914	\$8.95
9V	ea	SB-2916	\$7.95

## ALKALINE BATTERIES - SPECIALITY TYPE

### 6, 9, 12V ALKALINE BATTERIES

- Blister packed

(A) 12V CAR ALARM REMOTE CONTROL BATTERY - A23  
TYPE/L1028/SLR23/GP23A  
(HOUSE BRAND)

As used in remote controls for most car alarms. Size 9.5mm dia x 27mm high. See photo "A".



TYPE	CAT.	Qty 1+	Qty 10+	Qty 20+
A23	SB-2420	\$1.95	\$1.75	\$1.55

(B) 12V THIN CAR ALARM REMOTE CONTROL BATTERY - L828 TYPE

As used in new generation small sized car alarm remote controls. Size 8mm dia x 28mm high. See photo "B".

TYPE	CAT.	Qty 1+	Qty 10+	Qty 20+
L828	SB-2422	\$3.20	\$2.83	\$2.45

(C) 6V ALKALINE BATTERY - L1325/4LR44 TYPE

These are the same size as A544 batteries. Used mainly in cameras. Size 13mm dia x 25mm. See photo "C".

TYPE	CAT.	Qty 1+	Qty 10+	Qty 20+
L1325/4LR44	SB-2415	\$3.25	\$2.90	\$2.60

(D) 6V ALKALINE BATTERY

No L1016/11A. Dimensions: 9.5mm dia x 15mm high. See photo "D".

TYPE	CAT.	Qty 1+	Qty 10+	Qty 20+
L1016/11A	SB-2421	\$2.95	\$2.60	\$2.30

(E) 9V ALKALINE BATTERY - GP29A/L822 TYPE

General purpose remote control battery. Dimensions: 7.7(dia) x 21.4(L)mm Capacity 18mAh. See photo "E".

TYPE	CAT.	Qty 1+	Qty 10+	Qty 20+
GP29A/L822	SB-2427	\$3.95	\$3.45	\$3.15

### 12V PANASONIC ALKALINE

Car alarm battery.

- LRV08, A23, L1028.

TYPE	CAT.	Qty 1+	Qty 10+	Qty 20+
A23	SB-2970	\$3.95	\$3.55	\$3.15



### N SIZE EXTRA HEAVY DUTY ZINC CHLORIDE - VINNIC

These batteries are superior to standard carbon-zinc cells but are much cheaper and have a longer shelf life.

- Blister Packed

TYPE	PACK	CAT.	Qty 1+	Qty 10+	Qty 20+
N	2	SB-2346	\$3.45	\$3.05	\$2.75



### ECLIPSE LANTERN BATTERY

A 6 volt heavy duty battery as used in many torches including the very popular Dolphin.

- Carbon zinc battery

CAT.	Qty 1+	Qty 10+	Qty 20+
SB-2394	\$5.45	\$4.90	\$4.30





### ALL IN ONE 9V EMERGENCY CHARGER WITH MICRO USB AND LIGHTNING CONNECTOR

Provides a Lightning™ and Micro USB plug to suit a broad range of phones. Perfect for an emergency bag, camping kit, and will easily slip into your pocket. It's supplied with a 9V battery, but keeping a few spares, or even using Lithium 9V batteries, will further improve its usefulness.

- 6 hours talk time
- 6 days standby
- 4 hours internet use



<b>SPECIFICATIONS</b>	<b>MB-3663</b>			
<b>Battery</b>	9V (included)			
<b>Weight</b>	10g (excluding battery)			
<b>Dimensions</b>	20(W) x 25(H) x 28(D)mm (excluding battery, cap on)			
	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 5+</b>	<b>Qty 10</b>
9V Emergency Charger	MB-3663	\$9.95	\$8.95	\$7.95

## LITHIUM BATTERIES

### ECLIPSE PLUS LITHIUM AAA 1.5V BATTERY PACKS

This range of Lithium Iron Disulfide (LiFeS<sub>2</sub>) batteries pack 5-6 times the capacity of their alkaline equivalents in high power applications. Using these represents a 40-60% cost saving over alkaline batteries. Refer to our website for discharge performance specifications with comparison to leading brand name Lithium batteries.

**Not rechargeable.**

SPECIFICATIONS	BOTH MODELS
Capacity	>1200mAh
Max Constant Load	1500mA
Max Pulse Load	2000mA
Terminal Voltage	1.5V



	PKT	CAT.	Qty 1+	Qty 10+	Qty 20+
AAA	2	SB-2351	\$10.95	\$9.45	\$8.45
AAA	4	SB-2352	\$16.95	\$14.95	\$13.45

### ECLIPSE PLUS LITHIUM AA 1.5V BATTERY PACKS

This range of Lithium Iron Disulfide (LiFeS<sub>2</sub>) batteries pack 5-6 times the capacity of their alkaline equivalents in high power applications. Using these represents a 40-60% cost saving over alkaline batteries. Refer to our website for discharge performance specifications with comparison to leading brand name Lithium batteries.

**Not rechargeable.**

SPECIFICATIONS	BOTH MODELS
Capacity	>3000mAh
Max Constant Load	2000mA
Max Pulse Load	3000mA
Terminal Voltage	1.5V



	PKT	CAT.	Qty 1+	Qty 10+	Qty 20+
AA	2	SB-2355	\$11.95	\$10.45	\$9.45
AA	4	SB-2357	\$17.95	\$15.95	\$13.95

### ECLIPSE LITHIUM 9V BATTERY 1200MAH

As you know, lithium batteries are essential for such things as smoke detectors, wireless alarm systems, garage door opener remotes etc. They are a bit more expensive, but your family's lives are worth a couple of bucks.

Available in single or twin pack:

**Not rechargeable.**

Please note that the physical size of these batteries is slightly different to standard 9V batteries.



	PKT	CAT.	Qty 1+	Qty 8+	Qty 15+
9V	Single	SB-2397	\$13.95	\$12.45	\$10.95
9V	2	SB-2396	\$24.95	\$22.45	\$19.95

### ENERGIZER 1.5V LITHIUM LONG LASTING BATTERIES

The perfect power source for high drain current draw cameras, camcorders, personal stereos, mobile phones, palm top computers and TVs.

- Up to 3 times the life of any alkaline battery.
- Up to 10 times the life of ordinary carbon zinc battery
- Guaranteed shelf life up to 10 years.
- 1.5V, 1.4Amp hour (AA).
- Blister Packed

**Not rechargeable.**

Made in Singapore.



	PKT	CAT.	Qty 1+
AAA	2	SB-2372	\$13.95
AA	2	SB-2375	\$13.95

### PANASONIC® LITHIUM CAMERA BATTERIES

**Not rechargeable.**

CAT.	TYPE	VOLT	CURRENT
SB-2980	CR123	3V	1500mA
SB-2982	CR2	3V	800mA

**Panasonic**



		CAT.	Qty 1+	Qty 10+	Qty 20+
CR123	Each	SB-2980	\$9.95	\$8.75	\$7.75
CR2	Each	SB-2982	\$11.95	\$10.75	\$9.55

### CR123A 3V LITHIUM BATTERIES 6 PACK

Contains 6 CR123A lithium camera batteries, commonly used in LED torches and cameras.

- 3V 1600mAh
- Suitable for Uniden App Cam Solo wireless cameras (requires 4 x CR123A batteries per camera)

**Not rechargeable.**



	PKT	CAT.	Qty 1+	Qty 8+	Qty 15+
CR-123A	Pack of 6	SB-2324	\$17.95	\$15.95	\$14.35

## Tech Talk: Lithium Can Be Dangerous

All the batteries on this page are non-rechargeable. Do not try to recharge any of these lithium batteries. There are basically two types of lithium batteries: rechargeable & non-rechargeable. Rechargeable batteries are usually referred to as Lithium-Ion, Lithium Polymer or LiFePO<sub>4</sub>. The ONLY WAY to recharge such batteries is with a dedicated charger for the particular battery size, such as CRV-3 or CR123A types. Such chargers are specifically designed to strictly manage the special charge rate requirements for rechargeable lithium ion or lithium polymer cells. Standard Lithium non-rechargeable batteries are not designed to be recharged - even with a Lithium-Ion or Lithium-Polymer charger. Indeed there is a VERY HIGH likelihood that the battery will violently EXPLODE if any attempt is made to charge a standard Lithium battery. DO NOT try to recharge ANY lithium battery with an undedicated charger, such as lead acid or Ni-Cd charger, under any circumstances. All batteries on this page are non-rechargeable. Do not try to recharge any of these lithium batteries.

### LITHIUM CAMERA BATTERIES

Blister Packed (**Not rechargeable**)

CAT.	TYPE	VOLT	CURRENT
SB-2400	CR123A	3V	1300mA
SB-2401	CR-P2	6V	1300mA
SB-2402	2CR5	6V	1300mA
SB-2404	CR2	3V	750mA



		CAT.	Qty 1+	Qty 8+	Qty 15+
CR123A	Each	SB-2400	\$4.95	\$4.45	\$3.90
CR-P2	Each	SB-2401	\$11.95	\$10.75	\$9.55
2CR5	Each	SB-2402	\$9.95	\$8.75	\$7.75
CR2	Each	SB-2404	\$5.95	\$5.35	\$4.75

## COMPUTER BACKUP

### 3.6V LITHIUM COMPUTER BACKUPS

These high capacity batteries are used in many desktop and notebook computers to retain date, time and configuration information while the computer is switched off. They are also useful where long shelf life is important or when the battery is to be fitted into difficult or sealed access areas. Storage life is up to 10 years.

- 14.5mm diameter

**Not rechargeable**

CAT.	SIZE	CAPACITY (MAH)	MAX CURRENT (MA)	HEIGHT CONNECT (MM)
SB-1770	Half AA	1200	50	25mm Nipple
SB-1771	Half AA	1200	50	25mm Axial Lead
SB-1774	AA	2400	100	50mm Nipple
SB-1775	AA	2400	100	50mm Axial Lead



		CAT.	Qty 1+	Qty 10+	Qty 20+
Half AA	Each	SB-1770	\$11.95	\$10.70	\$9.50
Half AA	Each	SB-1771	\$13.95	\$12.35	\$10.95
AA	Each	SB-1774	\$16.95	\$14.95	\$13.35
AA	Each	SB-1775	\$18.95	\$16.95	\$14.95

## Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

**Catalogue Department - Jaycar Electronics:**  
catalogue@jaycar.com

## SEALED LEAD ACID BATTERIES

Sealed lead acid batteries are used generally for two purposes. Standby applications such as emergency power for safety lights or security systems, computer peripheral terminals etc. and cyclic applications as portable power for MP3 players, DVRs, toys, lights & use with solar panels for remote power.

- Leak proof construction
- Long service life
- Usable/rechargeable in any position
- Deep discharge recovery
- Wide operating temperature range
- High discharge rate capability
- Designed not to discharge hydrogen into the atmosphere

Charging voltage for 12 volt is 14.7 volts and for 6 volt is 6.8 to 7.4 volts. The charging time must be doubled if the charge current is halved.

## 6 VOLT SLA BATTERIES



### SLA BATTERY CARRY BAG

Designed for carrying a large sealed leadacid battery. Suits sealed lead-acid batteries 12V 7.2Ah (SB-2486) or 6V 12Ah (SB-2497) - (and Panasonic equivalents) approx. max. size 151 x 65 x 101mm. Features fused cigarette-lighter socket (10A), zip-up cover, and internal fold-away protective flap.

- Battery can be medium/slow charged INSIDE THE BAG!




	DIMENSIONS	CAT.	Qty 1+	Qty 4+	Qty 10+
1.3Ah	97(L) x 51(D) x 21(H)mm	SB-2495	\$12.95	\$11.35	\$10.35
4.5Ah	70(L) x 47(D) x 106(H)mm	SB-2496	\$14.95	\$13.35	\$11.70
5Ah	67(L) x 67(D) x 97(H)mm	SB-2498	\$19.95	\$17.95	\$15.95
12Ah	151(L) x 51(D) x 100(H)mm	SB-2497	\$32.95	\$29.65	\$26.35

	CAT.	Qty 1+	Qty 4+	Qty 10+
	HB-6360	\$19.95	\$17.95	\$15.95


## 12 VOLT SLA BATTERIES

12V 1.3AH




SB-2480

12V 2.2AH




SB-2482

12V 4.5AH




SB-2484

12V 6.5AH




SB-2485

12V 7.2AH




SB-2486

12V 9AH




SB-2487

12V 12AH



SB-2489

12V 18AH



SB-2490

1 YEAR WARRANTY

DIMENSIONS	CAT.	Qty 1+	Qty 4+	Qty 10+
1.3Ah 97(L) x 43(D) x 57(H)mm	SB-2480	\$19.95	\$17.70	\$15.70
2.2Ah 178(L) x 34(D) x 66(H)mm	SB-2482	\$23.95	\$21.55	\$19.15
4.5Ah 90(L) x 70(D) x 106(H)mm	SB-2484	\$28.95	\$26.05	\$23.15
6.5Ah 150(L) x 65(D) x 93(H)mm	SB-2485	\$29.95	\$26.95	\$23.95

DIMENSIONS	CAT.	Qty 1+	Qty 4+	Qty 10+
7.2Ah 151(L) x 65(D) x 93(H)mm	SB-2486	\$34.95	\$31.45	\$27.95
9Ah 150(L) x 65(D) x 93(H)mm	SB-2487	\$44.95	\$40.45	\$35.95
12Ah 150(L) x 100(D) x 93(H)mm	SB-2489	\$56.95	\$50.95	\$45.45
18Ah 181(L) x 77(D) x 167(H)mm	SB-2490	\$79.95	\$71.95	\$63.95

## Select Your Model: Sealed Lead Acid Batteries

	Capacity	20hr Rate	10hr rate	5 hr rate	1 hr rate	Initial charge current	Cycle Voltage	Standby Voltage	Page
SB-2495	6V 1.3Ah	65mA (1.3Ah)	117mA (1.17Ah)	208mA (1.04Ah)	780mA (0.78Ah)	<0.39A	7.20-7.50V	6.75-6.90V	384
SB-2496	6V 4.5Ah	210mA (4.2Ah)	378mA (3.7Ah)	672mA (3.36Ah)	2.25A (2.25Ah)	<1.2A	7.20-7.50V	6.75-6.90V	384
SB-2498	6V 5Ah	250mA (5.0Ah)	450mA (4.5Ah)	800mA (4Ah)	3.0A (3.0Ah)	<1.5A1	7.20-7.50V	6.75-6.90V	384
SB-2497	6V 12Ah	600mA (12Ah)	1.08A (10.8Ah)	1.92A (9.6Ah)	7.2A (7.2Ah)	<3.6A	7.20-7.50V	6.75-6.90V	384
SB-2480	12V 1.3Ah	65mA (1.30Ah)	117mA (1.17Ah)	208mA (1.04Ah)	780mA (0.78Ah)	<0.39A	14.4-15.0V	13.5-13.8V	384
SB-2482	12V 2.2Ah	110mA (2.2Ah)	198mA (1.98Ah)	352mA (1.76Ah)	1.32A (1.32Ah)	<0.66A	14.4-15.0V	13.5-13.8V	384
SB-2484	12V 4.5Ah	200mA (4.5Ah)	380mA (3.8Ah)	680mA (3.4Ah)	2.40A (2.4Ah)	<1.2A	14.4-15.0V	13.5-13.8V	384
SB-2485	12V 6.5Ah	325mA (6.5Ah)	486mA (4.86Ah)	864mA (4.32Ah)	3.24A (3.24Ah)	<1.62A	14.4-15.0V	13.5-13.9V	384
SB-2486	12V 7.2Ah	360mA (7.2Ah)	650mA (6.5Ah)	1.15A (5.75Ah)	4.32A (4.32Ah)	<2.1A	14.4-15.0V	13.5-13.8V	384
SB-2487	12V 9Ah	450mA (9Ah)	810mA (8.1Ah)	1.44A (7.2Ah)	5.4A (5.4Ah)	<2.7A	14.4-15.0V	13.5-13.9V	384
SB-2489	12V 12Ah	600mA (12Ah)	1.08A (10.8Ah)	1.92A (9.6Ah)	7.2A (7.2Ah)	<3.6A	14.4-15.0V	13.5-13.9V	384
SB-2490	12V 18Ah	900mA (18Ah)	1.72A (17.2Ah)	3.05A (15.2Ah)	10.8A (10.8Ah)	<3.4A	14.4-15.0V	13.5-13.9V	384
SB-1698	12V 26Ah	1.3A (26Ah)	2.11A (21.1Ah)	3.74A (18.7Ah)	14A (14Ah)	<7.8A	14.4-15.0V	13.5-13.9V	385
SB-1699	12V 38Ah	1.94A (38.8Ah)	3.8A (38Ah)	6.16A (30.8Ah)	22.3A (22.3Ah)	<12A	14.4-15.0V	13.5-13.9V	385
SB-1695	12V 100Ah	5.1A (102Ah)	10A (100Ah)	16.2A (81Ah)	58.5A (58.5Ah)	<30A	14.4-15V	13.5-13.8V	385

Note: Current is limited by spring terminal type.



## DEEP-CYCLE BATTERIES

### 12V DEEP CYCLE AGM BATTERIES

This product has an absorbent glass mat embedded in the structure of the plates. (There are 6 sets of plates, each 2.0V which makes up a "battery" of plates, i.e. 12V). The mat does two things. It reinforces the lead frame of each plate, or cell, and it stops the plates from buckling under heavy discharge current. By helping make the innards of the battery virtually

solid, you can mount it in any position, but it is still preferable, of course, to mount the battery upright, even for the sake of convenience of terminal access. They are an excellent product.

**Note: It is important to not discharge an AGM more than 60% between recharge.**

**Note: 150Ah and 200Ah not stocked in all stores but can be ordered.**



WARRANTY

#### 12V 75AH

SB-1680

260(W) x 168(D)  
x 211(H)mm



#### 12V 100AH

SB-1682

330(W) x 172(D)  
x 217(H)mm



#### 12V 120AH

SB-1683

450(W) x 172(D) x 217(H)mm



#### 12V 150AH

SB-1684

485(W) x 170(D) x 240(H)mm



#### 12V 200AH

SB-1686

523(W) x 239(D) x 217(H)mm



	CAPACITY AT 0°C	SELF DISCHARGE AT 3 MONTHS	MAX DISCHARGE (5 SEC.)	WEIGHT	CAT.	Qty 1+	Qty 2+	Qty 4+
75Ah	10 hour rate 75Ah	86%	1,125A	20.5kg	SB-1680	\$279.00	\$259.00	\$249.00
100Ah	10 hour rate 100Ah	91%	1,500A	28.4kg	SB-1682	\$329.00	\$309.00	\$289.00
120Ah <b>NEW</b>	10 hour rate 120Ah	91%	1,800A	37.8kg	SB-1683	\$399.00	\$379.00	\$359.00
150Ah	10 hour rate 150Ah	91%	2,250A	40.2kg	SB-1684	\$499.00	\$469.00	\$449.00
200Ah <b>NEW</b>	10 hour rate 200Ah	91%	3,000A	59.2kg	SB-1686	\$649.00	\$609.00	\$579.00

### 12V DEEP CYCLE GEL CELL SLA BATTERIES

These genuine deep-cycle batteries add to our already substantial range of batteries. As with all gel cells, they can be operated and charged in any position, are leakproof and completely sealed.

Gel batteries are ideal for solar power, camping, 4WD, auxiliary applications and anywhere deep discharge and recovery is required.

Check with our call centre for freight rates if you are a long way from our warehouse. (SYDNEY)



WARRANTY

#### 12V 26AH

SB-1698

165(W) x 172(D) x 110(H)mm



#### 12V 38AH

SB-1699

197(W) x 165(D) x 170(H)mm



#### 12V 100AH

SB-1695

330(W) x 173(D) x 223(H)mm



	NOMINAL CAPACITY	SELF DISCHARGE AT 3 MONTHS	MAX DISCHARGE (5 SEC.)	WEIGHT	CAT.	Qty 1+	Qty 4+	Qty 10+
26Ah	10 hour rate 26Ah	91%	260A	8.35kg	SB-1698	\$129.00	\$115.95	\$102.95
38Ah	10 hour rate 38Ah	91%	380A	13kg	SB-1699	\$199.00	\$178.95	\$158.95
100Ah	10 hour rate 100Ah	91%	1,000A	31.5kg	SB-1695	\$379.00	\$359.00	\$339.00

### 12V 150AH SLEEK AGM DEEP CYCLE BATTERY

This high performance deep cycle AGM battery offers an excellent power storage solution to those with minimal space. A high energy density and top grade materials allow such a high capacity of 150Ah to be packed into such a small footprint - just 123 x 556mm, suitable to fit into a standard 23" rack. Front terminal access makes battery connections neat and simple, and the durable carry handles allow for easier handling and inspection. Designed to perform in harsh tropical conditions, and with a superior high rate discharge performance and higher cycle service life, this battery is perfect for a wide array of applications including remote solar systems, caravan and RV, motor home, and marine. With a float voltage of 13.5V, this AGM battery is perfectly suited to caravans to make the most of charging off the engine alternator. See our website for a full specification datasheet.

- Small footprint to suit installations in tight areas such as marine, caravans or motor homes
- Design Float life of 12+ years in accordance with Eurobat classification of long life battery
- Suitable for standard 23" rack
- Advanced AGM (absorbed glass matt) separator offering longer service life and superior high rate discharge performance
- Threaded post copper insert terminals offering high conductivity
- Fire retardant container and cover (UL40 - V0)
- Compliant to IEC 60896-21/22:2004 and UL approved

**Note: Not stocked at stores but can be ordered.**



WARRANTY

SPECIFICATIONS	SB-1822
Float / Boost Voltage	13.5V / 13.8V
Capacity	150Ah (10hr rate), 165Ah (20hr rate)
Self-Discharge	< 1% per week
Shelf Life Without Re-Charge	Up to 6 months
Operating Temperature	-40°C to 60°C
Designs Float Life	12+ years at 27°C
Design Cycle Life	1800+ cycles @20%DOD, 900+ cycles @50%DOD, 500+ cycles @80%DOD
Dimensions	123(W) x 556(D) x 296(H)mm
Weight	52kg

TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
12V 150Ah	SB-1822	\$839.00	\$749.00	\$669.00





## BATTERY MANAGEMENT

### HIGH PRECISION 200A DC WATT METER POWER ANALYSER WITH LCD DISPLAY

This exceptional trouble shooting device is not just a watt meter it is an All-in-one power meter, volt meter, amp-hour meter, ammeter and energy meter. It's designed for systems less than 60V and currents up to 200A (Peak). Slotting in between various links of a power system it can check charge going to a battery from battery charger or alternator, solar panel output, charge controller output, health and performance of batteries, evaluate charging efficiency or measure power and energy consumption of any load device with a battery. The Watt Meter only requires a tiny 7mA draw to operate making little difference to power production during usage. Ideal for cars, boats, caravans, off-grid installations, Wind, solar installations, and so much more.

- 75A continuous / 200A Max
- Up to 60VDC compatibility
- Accurate amps, volts, watts, amp-hours, watt-hours, peak amps, minimum volts (sag), peak watts

#### Applications:

- 1) How Much Power Does my Fridge Use - with the Battery connected to the SOURCE side and Car Fridge (or other accessory) connected to the LOAD side. The Watt Meter shows the current into the Fridge, voltage and power at the battery and accumulates the Ah and Wh while the fridge is running.
- 2) How much charge is going into my battery - With a battery charger (or alternator) connected to the SOURCE side and the aux battery connected to the LOAD side, the Watt Meter shows the charging current into the battery, the voltage and charging power at the battery and accumulates the charge (Ah) and energy (Wh) into the battery.
- 3) What is the output of my solar panel - With a solar panel connected to the SOURCE side and solar regulator connected to the LOAD side, the Watt Meter shows the charging current into the regulator, the voltage and charging power at the solar panel and accumulates the charge (Ah) and energy (Wh) into the regulator.
- 4) How much charge is my solar panel putting into my battery - Now with a solar regulator connected to the SOURCE side and battery connected to the LOAD side, the Watt Meter shows the charging current into the battery, the voltage and charging power at the regulator and accumulates the charge (Ah) and energy (Wh) into the battery.

	CAT.	Qty 1+	Qty 4+	Qty 10
Bare Leads	MS-6190	\$49.95	\$44.95	\$39.95
Anderson type 50-Amp connectors	MS-6192	\$59.95	\$53.95	\$47.95



MS-6190

MS-6192

SPECIFICATIONS	BOTH
<b>Reads</b>	4.8V - 60V (0V - 60V with optional auxiliary battery)
<b>Measures</b>	Current: 0-200A @ 0.01A Resolution Voltage: 0-60VDC @ 0.01V Resolution Power: 0-6554W @ 0.1W Resolution Watt Hours: 0-650kWh @ 0.1Wh Resolution Ampere Hours: 0-6554Ah @ 0.01Ah Resolution
<b>Cable</b>	8AWG
<b>Display</b>	16 x 2 backlit LCD Display
<b>Dimensions</b>	110(W) x 45(H) x 26(D)mm (Excluding Cables)
<b>Net Weight</b>	150g

### CAR BATTERY DISCHARGE PROTECTOR

This handy device plugs straight into your vehicle cigarette lighter socket, and warns you when battery power is running low. Not only that, but it disconnects power through the unit when power gets too low. This means you can run 12V lighting, an inverter or charger etc, and not risk draining your battery such that it causes damage. Simple plug and play operation, no tools required!

- Low battery level indication
- Automatic power disconnection
- Cigarette Lighter Connection
- 10A Circuit protection Fuse
- 95(L) x 35(W) x 155(H)mm
- 138g



CURRENT	CAT.	Qty 1+	Qty 5+	Qty 10+
8A	MB-3676	\$19.95	\$17.95	\$15.95

### 12V BATTERY LOW VOLTAGE MONITOR AND PROTECTOR 10A

Now you don't need any installation to protect your battery. This inline device connects with a cigarette lighter plug and socket, and automatically shuts off power to the connected device (such as a fridge or lighting) if the voltage drops below 11.6V! Power is automatically restored when voltage exceeds 12.8V (eg, the vehicle engine is started). It's simple piece of mind when running power-hungry equipment at a campsite, for instance. Suitable for loads up to 10A.

- Protects battery from excessive discharge
- Power status indicator
- No installation required



SPECIFICATIONS	MB-3677
<b>Input Voltage</b>	12V
<b>Cut-off Voltage</b>	11.6V
<b>Cut-in Voltage</b>	12.8V
<b>Current</b>	10A (Max.)
<b>Weight</b>	128g
<b>Dimensions</b>	60(W) x 52(H) x 85(D)mm
<b>Cable Length</b>	85cm

CAT.	Qty 1+	Qty 5+	Qty 10+
MB-3677	\$19.95	\$17.95	\$15.95

### BATTERY DISCHARGE PROTECTOR

Protects your car battery from total discharge by switching off appliances such as fridges and TV sets before the battery voltage drops to an unrecoverable level. When battery voltage is re-established by recharging, it switches appliances on automatically. The interrupting voltage is adjustable from 10.4 to 13.3VDC. Essential low-cost insurance if you have a dual battery setup in a boat, 4WD, RV or for an alternative energy system such as solar or wind power.



SPECIFICATIONS	AA-0262
<b>Operating Voltage</b>	12VDC
<b>Max. Switching Current</b>	20A
<b>Interrupting Voltage</b>	10.4 - 13.3VDC
<b>Resetting Voltage</b>	Approx. 0.8V (+/-0.3V) above interrupt voltage
<b>Current Consumption</b>	< 0.7mA when OFF, < 1.6mA when ON
<b>Dimensions</b>	87(L) x 60(W) x 32(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC 20A	AA-0262	\$44.95	\$40.45	\$35.95

### LEAD-ACID BATTERY CONDITIONER

Removes or reduces sulphation which kills batteries. When wet-cell lead-acid batteries are allowed to sit around they will sulphate up in as short a time as 6 months. The sulphate builds up on the plates and separators. This product basically dissolves the sulphation. The product is so good that the manufacturer will extend the warranty on a new battery by a year if used when the battery is new.

- One bottle will do up to an N70Z size battery (4WD, boat, truck etc)
- Will not work with sealed batteries. i.e. you must be able to access the battery fluid to use.



	CAT.	Qty 1+	Qty 4+	Qty 10+
92ml	NA-1420	\$9.95	\$8.95	\$7.95

### Find Out More In Store:

Our staff offer friendly and helpful service.  
We're here to help.

## BATTERY TESTER

### 12VDC LEAD ACID BATTERY TESTER

This battery tester quickly, easily, and accurately measures the actual cold cranking amps capability of the vehicle starting battery. It tests most automotive cranking lead acid batteries, including an ordinary lead acid battery, AGM flat plate battery, AGM spiral battery, and GEL battery, etc. It can identify a battery with bad cells, has reverse polarity protection, and meets major battery testing standards such as CCA, BCI, CA, MCA, JIS, DIN, IEC, EN, SAE, GB. The handy device features an LCD display to indicate the results, a menu tab and clips to connect the battery tester to the vehicle's battery.

- Voltage Measure Range: 6-30VDC
- Dimensions: 125(L) x 70(W) x 25(H)mm

Note: Battery not included.



VOLTAGE	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC	QP-2261	\$79.95	\$71.95	\$63.95

### 12-24V BATTERY TESTER

A simple to use battery tester to check charge condition. Simply connect and read. Includes three different connector methods - battery clamps, eye terminals, and cigarette lighter socket. Suitable for 12 and 24V car batteries, sealed lead acid batteries, and other high-capacity batteries. Provides voltage reading as well as LED indication for under/overcharge. Reverse polarity protected. Note: cigarette lighter socket testing method may only be available with ignition on.

- Simple operation
- Versatile connections
- Under / overcharge indication
- Voltage Range: 11-17VDC / 22-30VDC
- Dimensions: 75(W) x 48(H) x 19(D)mm



VOLTAGE	CAT.	Qty 1+	Qty 3+	Qty 6+
12/24VDC	QP-2263	\$24.95	\$22.45	\$19.95

## BATTERY DISCONNECTS & ACCESSORIES

### BATTERY ISOLATION SWITCHES

High current rated battery isolation switches for high power applications. Often fitted to boats, trucks, motor homes and other battery based power systems to allow for quick and easy electrical isolation of the battery for protection against discharge, fire and other safety risks. Each switch features high quality construction with large bolt-down terminals for electrical connection.

#### HIGH QUALITY 120A

- Large removable key actuator
- Continuous rating: 120A @ 12V
- Surge rating: 500A, 60mm diameter mounting plate

#### SPARE KEY TO SUIT SF-2245

SF-2244

#### PROFESSIONAL 500A

The switch handle features a tight and secure spring loaded actuation, locking the switch into the ON position and requiring you to pull the handle out to turn it off, avoiding accidental battery isolation. Features heavy gauge M12 brass bolt terminals, cast metal body for extra strength and durability, and is also supplied with a right angle mounting bracket.

- Continuous rating (6-48VDC): 500A
- Max rating (6-48VDC): 2000A (10 sec)
- Dimensions: 70(D) x 100(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
12V 120A	SF-2245	\$17.95	\$15.95	\$14.35
Spare Key to suit SF-2245	SF-2244	\$9.95	\$8.95	\$7.95
12V 500A	SF-2247	\$59.95	\$53.95	\$47.90



### BATTERY ISOLATOR SWITCHES WITH AFD

The switches themselves are very durable and rated for massive output. They feature removable windows on all four sides to cater for whatever cabling arrangement you have. Alternator Field Disconnect (AFD) protects your alternator when switching batteries in and out of the circuit. By disconnecting the alternator moments before the battery (moments after when re-engaging), there's always a load on the alternator to protect the regulation circuitry.



SF-2249

Two models available:

SPECIFICATIONS	SF-2249	SF-2250
Max Rated Voltage	48VDC	48VDC
Continuous Current	275A	200A
Surge Current (5min)	455A	300A
Cranking Current (10 sec)	1250A	1000A

	CAT.	Qty 1+	Qty 2+	Qty 4+
275A Battery - On/Off	SF-2249	\$39.95	\$35.95	\$31.95
200A Dual Battery - 1/2/Both/Off	SF-2250	\$49.95	\$44.95	\$39.95



WARRANTY

### 125A DUAL BATTERY ISOLATOR (VSR)

A voltage sensitive relay (VSR) is the best way to ensure you can always get your dual-battery vehicle started. If the radio stops working that's one thing, but if you're stranded because your car cannot start because you ran your fridge for too long, that's potentially a life and death scenario. It allows two batteries to be charged from your alternator. Once your main starter battery is sufficiently charged, it will begin charging the second battery too. Fully automatic with emergency override.



WARRANTY

SPECIFICATIONS	MB-3687
Current Rating	125A
Voltage Rating	12VDC (15VDC Max)
Cut-In Voltage	13.7VDC
Cut-Out Voltage	12.8VDC



	CAT.	Qty 1+	Qty 2+	Qty 4+
12V 125A	MB-3687	\$49.95	\$44.95	\$39.95

### 12V 125A DUAL BATTERY KIT WITH CABLE KIT

Adding a second battery to your vehicle or boat provides a major boost to power available when the engine is switched off. However some smarts are required to ensure you can charge both when the vehicle is running, but leave one fully charged when switched off for starting the engine again. This Voltage Sensitive Relay (VSR) kit provides everything you need to wire up your second battery, while handling the isolation during shut-off periods. Provided with marine-grade hardware, so it can be used on a boat or vehicle. Suitable for 12V systems, with a continuous rating of 125A. All wiring hardware and instructions included.

Note: additional black (negative) wire may be required for systems without chassis earth, such as fiberglass boats, depending on your installation.

- Automatically combines two batteries when charging and isolates the two batteries when not charging.
- Fully automatic once installed.
- Storage mode switch for full isolation

SPECIFICATIONS	MB-3681
Nominal Voltage	12VDC
Combine Voltage	13.3VDC
Open Voltage	12.8VDC
Continuous Rating	125A
Intermittant Rating	140A
Power Consumption	87(L) x 60(W) x 32(H)mm
Terminal Studs	M6(1/4")



	CAT.	Qty 1+	Qty 2+	Qty 4+
12V 125A	MB-3681	\$149.00	\$133.95	\$118.95

## Tech Talk: Battery Maintenance

Periodic visual inspection of the battery is recommended. If the battery is stored for over six months, it is recommended to charge and discharge the battery several times to recover the battery capacity, failure to do so may result in a loss of capacity and shorter battery life. Bear in mind that self-discharge has to be taken into consideration when storing a charged battery. The remaining battery capacity should be at least 50% after a month of storage at room temperature for a fully charged battery. High storage temperatures will accelerate the self-discharge, and reduce the remaining capacity.



## SOLENOIDS

### HIGH-GRADE INDUSTRY STANDARD SOLENOIDS

These are high-grade industry standard solenoids. Typically used to operate a winch for one-way operation or to operate a starter motor

SPECIFICATIONS	BOTH
Contact rating	12VDC
Power	4000W max.
High Current Contacts	5/16" Studs
Solenoid contacts	¼" QC tabs
Dimensions	130(L) x 110(H) x 70(W)mm

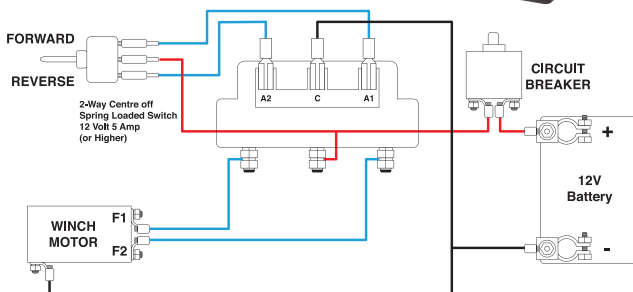
### SINGLE POLE CHANGEOVER SOLENOID

Used to operate a winch for one-way operation or to operate a starter motor. Supplied with a wiring diagram.

SY-4200



If motor runs backwards (ie goes forward when it should be reverse), swap the A1 and A2 connections



Connections for 3-wire winch motors that do not require armature switching

Alternative wiring required for some motors. See website for alternative wiring diagrams.

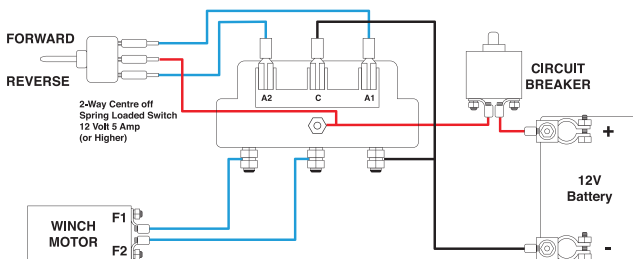
### DOUBLE POLE REVERSING SOLENOID

Typically used to operate a winch for two-way (i.e in and out) use. Supplied with a wiring diagram.

SY-4202



If motor runs backwards (ie goes forward when it should be reverse), swap the A1 and A2 connections



Connections for 2-wire winch motors

Alternative wiring required for some motors. See website for alternative wiring diagrams.

	CAT.	Qty 1+	Qty 5+	Qty 10
Single Pole Changeover Solenoid	SY-4200	\$69.95	\$62.95	\$55.95
Double Pole Reversing Solenoid	SY-4202	\$79.95	\$71.95	\$63.95

## BATTERY BOXES, TRAYS & CLAMPS

### BATTERY BOXES

Protect your batteries with these sturdy boxes. Perfect for mounting in your boat, trailer or caravan. Includes mounting clamps and lid strap to secure the box properly in place.

Two models available:

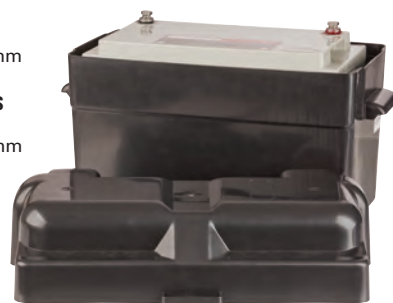
#### TO SUIT 40AH SLA BATTERIES

- Dimensions: Internal: 260(L) x 180(W) x 200(H)mm
- HB-8100

#### TO SUIT 100AH SLA BATTERIES

- Dimensions: Internal: 380(L) x 200(H) x 205(W)mm
- HB-8102

Note: Battery Not Included.



EXTERNAL DIMENSIONS	CAT.	Qty 1+	Qty 4+	Qty 10+
365 x 270 x 265mm	HB-8100	\$34.95	\$30.95	\$27.95
460 x 265 x 260mm	HB-8102	\$39.95	\$35.95	\$31.95

### BATTERY BOX WITH VOLTMETER & USB CHARGE

Simply fit your 100Ah deep cycle battery into the box, connect up the positive and negative wires, and you are ready to go.

Features an LED voltmeter to help monitor battery level, two high current marine grade cigarette power sockets, two USB sockets, and high current bolt terminals to connect your higher current loads such as an inverter. Over current protection included for the cigarette sockets.



SPECIFICATIONS	HB-8502
Suits Battery Size	325(W) x 200(H) x 185(D)mm
Circuit Breaker	16A
USB Sockets	1 x 1A, 1 x 2.1A (3.1A Total)
Cigarette Sockets	2
External Dimensions	424(W) x 306(H) x 251(D)mm
Internal Dimensions	338(W) x 220(H) x 206(D)mm

	CAT.	Qty 1+	Qty 10	Qty 25
	HB-8502	\$99.95	\$88.95	\$78.95

### HEAVY DUTY STEEL BATTERY TRAYS

These battery trays are pressed out of 1.2mm mild steel & vinyl coated to protect from acids, oils etc. They feature cruciform slots in the base to facilitate existing mounting holes in a truck or car chassis, as well as slots to allow battery hold-down rods.

Two sizes available:

- HB8104:
  - Battery Space: 275(L) x 180(W)mm
  - Overall Dimensions: 280(L) x 200(W) x 45(H)mm
- HB8106:
  - Battery Space: 330(L) x 180(W)mm
  - Overall Dimensions: 340(L) x 200(W) x 45(H)mm



Note: Not recommended for marine salt water use.

DIMENSIONS	CAT.	Qty 1+	Qty 4+	Qty 10+
Small - 280(L) x 200(W) x 45(H)mm	HB-8104	\$12.95	\$11.35	\$10.35
Large - 340(L) x 200(W) x 45(H)mm	HB-8106	\$13.95	\$12.35	\$10.95

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Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.\* Conditions apply.

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## Select Your Model: Battery Chargers



	MB-3519	MB-3619	MB-3527	MB-3522	MB-3625	MB-3623	MB-3609	MB-3611	MB-3613	MB-3607
<b>Output Voltage(s)</b>	6/12VDC	12VDC	6/12/24VDC	6/12VDC	12VDC	6/12/24VDC	6/12VDC	6/12VDC	12/24VDC	12/24VDC
<b>Max Output Current</b>	800mA	1A	1.2A	6.8A / 5.4A	10A	2A / 15A / 7A	1.5A	1A / 4A	7.2A / 3.6A	15A / 7.5A
<b>Multi Stage</b>				4	5	5	3	4	9	9
<b>IP65 Rated</b>								•	•	•
<b>Power Supply Mode</b>										•
<b>Page</b>	389	389	389	390	390	390	391	391	391	392

### 6V & 12V, 8A HEAVY DUTY WITH TRICKLE CHARGE

This charger is suitable for both 6 and 12 volt car, boat, motorcycle and lawnmower batteries. Featuring 4-stage LED charge indicators, the charger can be switched between trickle or heavy duty charge rates and is recommended for casual, domestic charging tasks. The unit is housed inside a tough plastic case with carry handle, is double insulated and features overload and reverse battery protection. The battery leads are terminated to heavy duty alligator clips on a 1 metre length of cable.

- Complies with Australian Electrical Safety Regulations
- Good general workshop charger



**1 YEAR WARRANTY**

	CAT.	Qty 1+	Qty 2+	Qty 4+
6V/12V 8A	MB-3522	\$74.95	\$67.45	\$59.95

### 12V 10A INTELLIGENT SWITCHMODE 5 STAGE CHARGER

A robust 12V battery charger packed with useful features to safely charge and maintain the life of your batteries. The front control panel allows you to control the battery type being charged (see below for supported types), the desired charge rate, the display mode (current, battery voltage, charge percentage). It will also indicate if there is a battery fault or if the polarity is reversed in which case the charging will immediately stop to protect the battery. Features positive/negative fly leads with clips that are neatly tucked away into a compartment at the rear of the unit.

- Short circuit & Overheat protection
- Voltage compensation
- Polarity reversal protection
- Fan cooled
- Faulty battery indicator
- Charging current: 2A (Low), 6A (Normal), 10A (High)
- Input voltage: 220VAC-240VAC
- Supported battery types: WET/Flooded, GEL, AGM, MF, VRLA rechargeable batteries
- Dimensions: 230(H) x 170(W) x 140(D)mm



**1 YEAR WARRANTY**

	CAT.	Qty 1+	Qty 2+	Qty 4+
12V 10A	MB-3625	\$139.00	\$124.95	\$110.95

## Tech Talk: Applications for MB-3519, MB-3619 and MB-3527 Chargers

These chargers are ideal for units that spend a long time unused and therefore with the danger that the starter motor batteries will sulphate up and die. By putting one of these units permanently on trickle charging the battery (in the jet-ski, vintage car, snowmobile, etc) will be ready to rock-n-roll the next time you use it.

### 6V/12V/24V 15A INTELLIGENT BATTERY CHARGER

An intelligent battery charger suitable for flooded and gel lead acid batteries including deep cycle batteries at 6V, 12V or 24V. The microprocessor controlled unit provides 4 stages of charging, Soft Start, Bulk Charge, Absorption and Float which assists in the batteries life expectancy and performance. An auto detection feature provides a user friendly experience, which can be pre-programmed or manually set for greater control. Should a blackout occur or AC input power be lost during a charging operation the memory function will resume charging once power is re-established. Other features include temperature/voltage compensation, reverse polarity/short circuit protection and a battery status indicator. Ideal for cars, motorcycles, caravans and boats with battery capacities between 20-200Ah. It's also ultraportable with a handy storage pocket in the back for the leads.

- Memory function
- Temperature controlled fan
- LED battery status display
- Temperature and voltage compensation

#### Protection:

- Anti spark
- Short circuit & reverse polarity
- Over heating/current voltage



**1 YEAR WARRANTY**

SPECIFICATIONS	MB-3623
<b>Input</b>	220 - 240VAC, 2.5A
<b>Output</b>	15A @ 12V, 7A @ 12V/24V, 2A @ 6V/12V/24V
<b>Dimensions</b>	230(H) x 170(W) x 140(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
6V/12V/24V 15A	MB-3623	\$159.00	\$142.95	\$126.95

See page 394 for our range of Jump Starters

## Tech Talk: Low Current Chargers

Low current output designed to steadily recharge sealed lead acid (SLA) batteries without causing the battery to overheat and become a swollen mess. As a guideline the charger's current rating should be no more than 10 to 15% of the battery's ampere-hour rating.

## Tech Talk: High Current Chargers

Higher current chargers steadily recharge larger lead acid batteries such as car, marine or high capacity deep cycle batteries. Available in simple models which need to be monitored manually ie. disconnected when the battery is fully charged, and automated models which monitor battery condition. Automated models have higher charge rates and improve battery life as their control systems prevent overcharging. Jaycar does not stock simple chargers, only automatic types.



## Switchmode Multi-State Battery Chargers:

High tech SLA battery chargers for automotive, marine, motorcycle, workshop or industrial use. All feature switchmode operation, multi-stage maintenance and charging, near-bulletproof performance & microprocessor control. All are IP rated for use in workshop and hostile environments.

### 6/12VDC 1.5A 3 STAGE BATTERY CHARGER

3 stage set and forget maintenance charger. Automatically diagnoses and recharges 6 or 12V lead acid, gel and AGM rechargeable batteries for boats, motorcycles etc. This little unit packs a real punch with 1.5A maximum charging power for faster recharging.

Maintains your battery for months and extends battery life by constantly monitoring battery condition for bulk, trickle or maintenance charges accordingly.



SPECIFICATIONS		MB-3609		
Output Voltage		7.2, 14.2VDC		
Charging Current		1.5A max		
Efficiency		>75%		
Back Current Drain		<35mA		
Capacity		6 - 20Ah		
Dimensions		110(L) x 58(W) x 46(D)mm		



WARRANTY

		CAT.	Qty 1+	Qty 2+	Qty 4+
6/12VDC	1.5A	MB-3609	\$49.95	\$44.90	\$39.90

### 12V-7.2A/24V-3.6A 9 STATE CHARGER

The bigger brother of MB-3611, this is a fully automatic 9 state charger for 12 or 24V sealed lead acid batteries- wet cell, gel cell and AGM.

Advanced diagnostics enable this unit to maximise charge rate while also maximising battery life. You can also switch it onto power supply mode where it will act as a 13.8V and up to 5A power supply, useful in supplying power to computer systems of many modern cars when replacing batteries.



SPECIFICATIONS		MB-3613		
Input Voltage		220 - 240VAC		
Output Voltage		5-14.7V (12V battery), 10-29.4V (24V battery)		
Input Current		5A @ 220VAC		
Charging Current		12V - 7.2A, 24V - 3.6A		
Efficiency		>75%		
Ripple		≤150mV		
Back Current Drain		≤1.2mA		
Rated		IP65		
Dimensions		210(L) x 90(W) x 60(D)mm		



WARRANTY

		CAT.	Qty 1+	Qty 2+	Qty 4+
12/24VDC	7.2A/3.6A	MB-3613	\$169.00	\$151.95	\$134.95

## Tech Talk: Multi State Charger

All-in-one chargers which have multiple charge settings to suit different sized batteries and charging requirements. Capable of recharging the battery and maintaining the charge state indefinitely, they are particularly well suited to being continuously connected to a battery. Some models also have additional functions such as rapid boost charging and can also be used as a general purpose high current power supply.

- Short circuit & reverse polarity protection
- Dust & splash proof - most are IP65 rated
- Anti-spark protection

### 6/12VDC 4A 4 STATE CHARGER

This smart charger uses a microprocessor to diagnose the batteries state of charge, providing the correct charging mode, eventually switching to float/maintenance charge to keep the battery at full charge and eliminate battery sulphation. Suitable for all types of SLA batteries-wet cell, gel cell and AGM ranging from 5Ah to 120Ah. This charger has pre charge mode to identify sulphated batteries and pre charge at low current for a period before automatically switching to high current to extend your batteries working life.

- 4A max at 12V/1A max at 6V



SPECIFICATIONS		MB-3611		
Charge Modes		Pre-charge, Constant current, Constant voltage, Float charge		
Ripple		≤120mV		
Back Current Drain		≤1.2mA		
Back Current Drain		<35mA		
Dimensions		200(L) x 70(W) x 50(D)mm		



WARRANTY

		CAT.	Qty 1+	Qty 2+	Qty 4+
6/12VDC	4A	MB-3611	\$89.95	\$80.95	\$71.95

## Tech Talk: Multi State Charging States

Charging states include: Battery test - Checks the battery to ensure it is ready for charging, polarity of leads etc.

**DESULPHATION:** Detects sulfated batteries. Pulsing current and voltage, removes sulfate from the lead plates of the battery restoring the battery.

**SOFT START:** Initial battery test to determine battery condition. If the battery is severely discharged, charger will begin the Soft Start stage. Charging starts with reduced current until battery voltage reaches a normal condition for charge.

**BULK MODE:** Major charging stage where the battery receives the majority of its charge. During this stage the battery is charged to up to 80% capacity.

**ABSORPTION MODE:** Completes the charge up to virtually 100% at a slower charge rate to protect the batteries working life.

**RECONDITION MODE:** Select "Recondition" mode, charges at higher voltage to recondition the sulfate of the battery to save battery life.

**ANALYSIS:** Tests if the battery can hold charge. Batteries that cannot hold charge may need to be replaced.

**LOAT:** Low constant voltage, minimal charge current, battery is fully charged.

**PULSE MODE:** Maintaining the battery at 95-100% capacity. The charger monitors the battery voltage and gives a pulse when necessary to keep the battery fully charged.



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Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)

## BATTERY CHARGERS

### 12V-15A/24V-7.5A 9-STATE CHARGER

Nine step fully automatic 15 amp high current charger with maintenance charging of all types of SLA batteries as well as lead-calcium batteries from 50 - 250Ah, and either 12V or 24V. The electronics are fully microprocessor controlled and protected against user error, so is totally safe to leave connected for months at a time. This charger will also charge in sub-zero temperatures, will recover sulphated batteries and can be used as a 10A power supply. Also features "boost" modes to recover deeply discharged batteries. The battery output lead has a temperature sensor to automatically compensate charging voltage dependant on temperature, so no matter what the conditions, you will get a full charge into your battery. The output lead is also fitted with Anderson connectors to allow for easy connection to existing wiring or use of the included alligator clips or bolt terminals.

- Short circuit and reverse polarity protection
- Anti-spark protection
- IP65 outdoor rated
- Standby, fault, mode selection & charging LEDs
- Mounting feet for wall mounting
- Safe to leave connected for months at a time

SPECIFICATIONS	MB-3607
Input Voltage	220 - 240VAC
Output Voltage	12 or 24VDC
Input Current	2A max
Charging Current	12V-15A, 24V-7.5A, 12V-Calcium-5A
Efficiency	>75%
Ripple	150mV, 300mA max
Back Current Drain	<5mA
Rating	IP65
Dimensions	260(L) x 135(W) x 70(H)mm



**3 YEAR**  
WARRANTY

		CAT.	Qty 1+	Qty 2+	Qty 4+
12V/24V	15A/7.5A	MB-3607	\$349.00	\$309.00	\$279.00

### 12/24V 20A DUAL INPUT DC/DC MULTI-STAGE BATTERY CHARGER

This is the ideal device for managing charging from multiple sources. It's really designed for managing solar + alternator power inputs, charging an auxiliary (house) battery system. The system will preference solar, providing lower loads on your engine when solar is available. With automatic ignition detection enabled, the system will isolate the starting battery when the engine is off, preventing discharge of your critical starting battery. It's fully automatic, with a set-and-forget type operation. A remote status indicator is included to provide in-car feedback of the system's status. Heavy duty screw down terminals are provided for power connections. Works with lead, AGM, and LiFePO4 batteries (selectable), and PV systems up to 30V open circuit voltage (ie, 12-24V rated panels).

- Dual input - solar and / or alternator/ car battery
- Works with 12V or 24V input
- 20A max charging current (automatically controlled)
- Automatic starter battery isolation

SPECIFICATIONS	MB-3683
Rated Output Power	13.8VDC @ 20A
Efficiency	≥90%
DC Input Voltage Range	9 - 16VDC (12VDC Input) / 18 - 32VDC (24VDC Input)
Weight	870g
Dimensions	130(W) x 188(H) x 55(D)mm



**NEW**  
2018

See website for full specifications.

		CAT.	Qty 1+	Qty 2+	Qty 4+
		MB-3683	\$299.00	\$269.00	\$239.00

### ON-BOARD MARINE BATTERY CHARGERS

Advanced electronic and fully automatic multi-stage marine battery chargers that mount on-board your boat to charge the cranking and house batteries, once you connect to shore power. The multi-stage charging process delivers five modes of operation, including start-up diagnostics, charging, conditioning, auto maintenance and storage reconditioning of each battery. This process is proven to extend the life of your batteries and will fully charge your batteries each time you connect to AC power. The charger Distributed-On-Demand® charging technology will automatically sense and distribute 100% of the available charging output of 8,12 (MB-3616), 15 or 20 amps (MB-3617) to any one battery or combination of all batteries. Each battery charger output is fully isolated.

- Multi-stage Charging: Analyse, Charging, Conditioning Auto Maintain (Sleep mode), Auto Maintain (Maintenance mode), Storage Recondition
- Overload, over voltage and over temperature protection
- Reverse Polarity Protection
- Ignition Protection
- LED display showing power, Charge, Charging/Conditioning/ Auto Maintain, Battery type
- Flood & Standard AGM / high performance AGM/GEL, and System Check OK LED
- Dimensions:  
MB-3616: 250(W) x 185(H) x 70(D)mm, 1.8kg  
MB-3617: 310(W) x 185(H) x 70(D)mm, 2.7kg



MB-3616

**1 YEAR**  
WARRANTY

- Suits Flooded, Standard AGM, and GEL batteries
- Prewired with 1.8m leads for easy installation
- 100% Waterproof (IP67) and Saltwater tested
- Microprocessor controlled
- System OK & battery bank trouble status indicators
- Energy saver & storage recondition modes
- IP68
- Pulsing Output
- Max output: 6A/8A/12A (MB-3616) / 15A/20A (MB-3617)



MB-3617

		CAT.	Qty 1+	Qty 2+	Qty 4+
12/24V	12A Dual Battery	MB-3616	\$299.00	\$269.00	\$239.00
12/24/36V	20A Triple Battery	MB-3617	\$399.00	\$359.00	\$319.00

## ▼ BATTERY CHARGERS (CONTINUED)

### 12/24V DC TO DC BATTERY CHARGERS

Ideal for 12V auxiliary battery charging. Includes an ignition line connection for automatic battery disconnection, can be programmed to provide the correct charging mode for a wide range of battery types. You don't need heavy connecting cables due to the buck boost feature, has reverse polarity and overload protection, all in neat easily mounted module. Has wide input voltage range which means you can charge your 12V battery from a 24V system.

SPECIFICATIONS	MB-3684	MB-3689
Compatible Input Voltage	9-32VDC	9-32VDC
Maximum Charging Current	20A	30A
Charging Voltage	13.1 - 14.4VDC	13.1 - 14.4VDC
Weight	385g	385g
Dimensions	180(W) x 134(H) x 60(D)mm	180(W) x 134(H) x 60(D)mm



		CAT.	Qty 1+	Qty 2+	Qty 4+
12/24V	20A	MB-3684	\$249.00	\$219.00	\$199.00
12/24V	30A	MB-3689	\$299.00	\$269.00	\$239.00

### 12V 4 STAGE 40A DC TO DC BOOST CHARGER

A significant voltage drop can occur in dual battery systems where the auxiliary battery is some distance from the main battery. A DC to DC boost charger the solution to that problem. This DC to DC boost charger is capable of taking an 8-16VDC input voltage, and giving a stable, regulated 13.8V/14.4V 4-stage charger output to give your auxiliary battery a full 100% charge. Even if the power is coming down a long cable and has suffered some voltage drop, this charger will boost the voltage back up. It can also be configured to work as a 13.8V power supply, again with the ability to boost voltage. Charge voltages are adjustable to suit different types of lead acid batteries via some DIP switches, and input/output connections are made with heavy duty terminals. Output current is rated at 40A to ensure a quick charge.

SPECIFICATIONS	MB-3690
Input Voltage	8-16VDC
Output Current	40A max
Bulk/Absorb Charge	14.6V, 14.8V selectable
Float Charge	13.2V-13.8V selectable
Power Supply Mode	13.8VDC
Efficiency	85-90%
Weight	1.7kg
Dimensions	260(L) x 140(W) x 80(H)mm



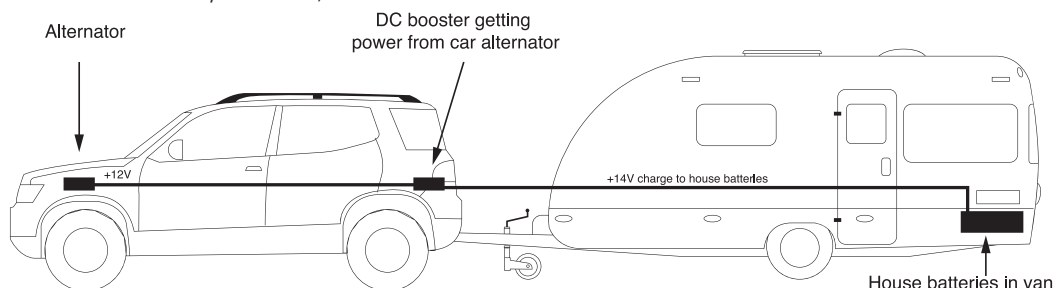
**1 YEAR**  
WARRANTY

		CAT.	Qty 1+	Qty 2+	Qty 4+
12V	40A	MB-3690	\$349.00	\$309.00	\$279.00

## Tech Talk: DC To DC Converters Explained

The alternator in your car engine will typically produce 14+ volts to keep your starter motor battery topped up nicely. If you are towing a caravan or camper trailer you really need to keep those house batteries in tip-top condition, especially after a long tow. It's quite possible that your 'house' batteries are being drained inadvertently as you are driving along. You certainly do not want to get to your camping site at the end of the day with half flat house batteries! Simply connecting a +12V wire from your car alternator to your house batteries will not do the job! Due to the distance between your alternator, the trailer connector

and the cable to your battery bank you will typically drop 2.0 volts along the way. There simply will not be enough 'juice' to charge up your house batteries. What you need is a DC booster that lifts your nominal +12V alternator charge to a healthy +14.4 to +16.0 DC (max) to automatically give your house batteries the charge they need as you drive along. They are automatic chargers and will not overcharge or damage your precious cells. You won't know what you did without one! They are shown on this page.



Keep your house batteries topped up on the run.



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!



**CLICK & COLLECT**

To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.



## Select Your Model: Jump Starters



	MB-3753	MB-3757	MB-3758	MB-3734	MB-3736	MB-3759
<b>Voltage</b>	12V	12V	12V	12V	12V	12/24V
<b>Cranking Current</b>	200A	300A	350A	300A	400A	500A (250A @ 24V)
<b>Amp Hours</b>	7.5Ah	11.1Ah	18Ah	12Ah	17Ah	22Ah
<b>Battery Type</b>	Li-Po	Li-Po	Li-Po	SLA	SLA	Li-Po
<b>LED Light</b>	•	•	•	•	•	•
<b>USB Out</b>	1 x 2.4A	1 x 1A, 1 x 2A	1 x 2.4A, Type-C x 3A	1 x 2.4A	1 x 0.5A, 1 x 2.1A	1 x 2.4A
<b>Air Compressor</b>					•	
<b>19V Laptop Supply</b>			•			
<b>Page</b>	394	394	395	395	395	395

It was not until battery manufacturers came up with small (generally) leadacid batteries with low internal impedance that enabled these products to emerge. With such battery technology, it was possible to make a portable power source in a reasonably lightweight package with enough grunt to be useful. Up until that point you had to borrow a full-size battery - or a nearby vehicle to jump-start a car or truck. Even if

that jump-start capability was the only feature, they'd be worth having. But, in addition they have other in-built features which include: small air compressors, AC/DC chargers, USB outlets, 240V inverters & jumper cables! No wonder these products are some of the fastest sellers in the Jaycar range. There is no reason why everyone who owns a car, 4WD, boat, caravan, truck etc. would not have one.

### 12V 400A GLOVEBOX JUMP STARTER & POWERBANK

Gone are the days of flooded engines and manual chokes to get your car started, but that pesky battery still has a habit of failing at the most inconvenient of times. This unit is amazing. Barely larger than a smartphone, and probably even lighter, but packs a huge power punch to get your car started. With a peak current available of 400 amps, it's powerful enough to get just about all but a tank running. Of course, sometimes emergency phone power is just as important as starting a car, so a 5V 2A USB port is provided to get you powered back up. It even includes a cigarette lighter socket charging adaptor, so it never has to

leave your car (just remember to charge it when your battery is NOT flat!). In case it's dark, it also incorporates a clever high-power LED. It can provide torch light, flashing strobe, or flashing blue and red - all have their respective purposes. These devices are now so reliable that similar ones are used by roadside service operations instead of jumping from their own vehicle! If you have more than one vehicle in your family, one for each is a very sound idea.



<b>SPECIFICATIONS</b>	<b>MB-3753</b>
<b>Battery Capacity</b>	7.5Ah
<b>Battery Type</b>	Lithium-polymer
<b>USB Output</b>	5VDC/2A
<b>Jump Starter Output</b>	12V @ 200A (400A peak)
<b>Weight</b>	271g
<b>Dimensions</b>	130(L) x 70(W) x 25(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	MB-3753	\$159.00	\$142.95	\$126.95

### 12V 450A LI-PO JUMP STARTER & POWERBANK

Powerful enough to start most vehicles, it'll crank an engine up to a 5L petrol, or 3L diesel. When not being used for jumpstarting it includes an LED torch, as well as a strobe/orange warning light. You can charge USB devices using one of the two USB ports, one rated at 1A, the other at 2A. Recharge time is less than 5 hours, recharged using the supplied mains adaptor. Never leave home without it!

<b>SPECIFICATIONS</b>	<b>MB-3757</b>
<b>Battery Capacity</b>	11.1Ah
<b>Battery Type</b>	Lithium-polymer
<b>USB Output</b>	5VDC/2A & 5VDC/1A
<b>Jump Starter Output</b>	12V @ 300A (450A peak)
<b>Weight</b>	420g
<b>Dimensions</b>	142(L) x 66(W) x 30(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	MB-3757	\$179.00	\$161.00	\$143.00



## Tech Talk: Lithium Polymer (Li-Po)

Lithium Polymer (Li-Po) batteries are exceptionally lightweight and pack a lot of power into very small and lightweight cases. They can also deliver an exceptionally high current in a very short space of time, making them ideal for jump starter and power bank devices. Sealed Lead Acid models still typically provide a higher capacity overall, but are much larger and heavier. Our Li-Po based models will fit in your glovebox without a fuss. However like most rechargeable batteries, regular recharging will keep them ready to go at a moment's notice.

## ▼ JUMP STARTERS (CONTINUED)

### 12V 700A JUMP STARTER & POWERBANK WITH LAPTOP POWER

Using a huge 18,000mAh Li-Po battery, rated at a massive 700A peak (350A continuous) jump starting current. It's an absolute beast, but still compact in size. Not only will it start your car, it provides 12/16/19V @ 3.5A to run a laptop. It also provides a 3.5A USB Type-C outlet, and a 2.4A USB outlet. That covers a large majority of portable devices, including the car! Will start big motors, up to 7L petrol and 4L diesel. Features an integrated torch and warning strobe, and is recharged using the supplied car or mains adaptor.

SPECIFICATIONS	MB-3758
Battery Capacity	18Ah
Battery Type	Lithium-polymer
USB Output	5VDC/2.4A (Type A) & 5VDC/3.0A (Type-C)
Jump Starter Output	12V @ 350A (700A peak)
Weight	640g
Dimensions	216(L) x 85(W) x 36(H)mm



	CONTINUOUS	PEAK	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	350A	700A	MB-3758	\$279.00	\$249.00	\$219.00

### 12V 1000A 12AH JUMP STARTER WITH 2.4A USB & LED LIGHT

Extremely portable with ultra heavy duty battery clamps. A cigarette lighter socket, 4 x LED worklight, and USB charging socket are also provided. Safety features such as reverse polarity protection and a master switch are provided. You can easily check the internal battery's condition at the touch of a button.

- 1 x USB charging sockets
- 1 x cigarette lighter sockets

SPECIFICATIONS	MB-3734
Battery Capacity	12Ah
Battery Type	Sealed Lead Acid
USB Output	5VDC/2.4A
Jump Starter Output	12VDC @ 300A (1000A peak)
Weight	6.1kg
Dimensions	251(L) x 173(W) x 307(H)mm



	CONTINUOUS	PEAK	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	300A	1000A	MB-3734	\$129.00	\$115.95	\$102.95

### 12V 1100A 17AH JUMP STARTER WITH AIR COMPRESSOR

So much more than a jumpstarter. Sure, it has self-contained jumper leads and a huge 17Ah battery, so it'll bail you out of many situations. But the real utility of this unit comes from the additional features. There's a built-in air compressor to inflate tyres. There's a 5-LED high power work light on the front so you can see what you're doing. 2 x cigarette lighter sockets as well as 2 x USB sockets for powering and recharging many devices. An internal battery condition gauge helps you make sure it's ready for action, and it's all in a self-contained unit! Includes mains and 12V charging adaptors.

- 400A 12V jump starting
- 2 x USB charging sockets
- 2 x cigarette lighter sockets
- Air compressor with tyre inflator

SPECIFICATIONS	MB-3736
Battery Capacity	17Ah
Battery Type	Sealed Lead Acid
USB Output	5VDC/2.1A & 5VDC/0.5A
Jump Starter Output	12VDC @ 400A (1100A peak)
Weight	8.6kg
Dimensions	285(L) x 227(W) x 310(H)mm



	CONTINUOUS	PEAK	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	400A	1100A	MB-3736	\$189.00	\$169.95	\$150.95

### 12/24V 1000/500A LI-PO JUMP STARTER

Lithium battery jump starters revolutionised jump starter technology, making them lightweight and ultra-compact. This one is compact, but it's great on the inside! It works on 12V or 24V systems, to provide a whopping 1,000A of peak current (500A on 24V systems). A massive 22,200mAh of LiPo power is ready to leap into action at a moment's notice. Capable of starting cars, motorbikes, but also large motors such as boats, trucks, buses, other industrial and commercial applications. Intelligent detection circuitry provides automatic 12 / 24 selection, with a manual override option useful with very low discharged batteries (when Auto mode isn't able to detect correct battery voltage). Like all good power banks, a USB outlet is also provided for mobile phone charging and powering other usb devices too. A small light is also included which is very useful at night and in enclosed spaces. Short circuit, over-temperature, over-current, and internal battery protections are included to ensure the jump starter stays in good working order. Mains and car charger included, with battery-level indicators on the unit.

- Ultra high capacity jump starter
- 12V / 24V compatible starting with automatic detection
- USB charging outlet and light

SPECIFICATIONS	MB-3759
Battery Capacity	22Ah
Battery Type	Lithium-polymer
USB Output	5VDC/2.4A
Jump Starter Output	12VDC @ 500A (1000A peak), 24VDC @ 250A (500A peak)
Weight	2.7kg
Dimensions	269(L) x 129(W) x 241(H)mm



	CONTINUOUS	PEAK	CAT.	Qty 1+	Qty 2+	Qty 4+
12/24V	500A(12)/250A(24)	1000A(12)/500A(24)	MB-3759	\$349.00	\$309.00	\$279.00

## JUMPER LEADS

### CAR BATTERY TYPE CLIPS

The 400 amp versions are very large and very strong. You cannot put your finger in the end, because it will probably give you a bite! These are ideal for our 300W and 500W inverters.

- All have insulated colour coded handles



CURRENT	LENGTH	MAX JAW OPENING		CAT.	Qty 1+	Qty 10+	Qty 50+
15A	55mm	14mm	Pair	HM-3010	\$3.50	\$3.15	\$2.75
30A	70mm	20mm	Pair	HM-3012	\$3.95	\$3.45	\$3.15
50A	98mm	25mm	Pair	HM-3015	\$5.50	\$4.90	\$4.30
200A	130mm	35mm	Pair	HM-3060	\$9.95	\$8.75	\$7.75
400A	155mm	22mm	Pair	HM-3085	\$15.95	\$14.35	\$12.70

### HEAVY DUTY 400A JUMPER LEADS WITH LED ILLUMINATION

A super handy set of jumper leads to leave in the back of the car! Each battery clamp has a LED light built in, powered by built-in batteries, so even in the dark you can find your way around the engine bay. The jumper leads are fitted with a voltage surge protector to keep your vehicle electronics safe. Supplied in a clear plastic carry case.

- Voltage surge protection WH6012\_Main
- 400A current rating
- 8 x LR44 button batteries included
- 3m long



		CAT.	Qty 1+	Qty 3+	Qty 6+
400A	3m Long	WH-6012	\$34.95	\$31.45	\$27.95

### EXTRA-HEAVY DUTY 700A JUMPER LEADS WITH LED ILLUMINATION

Rated at 700A, they are suitable for higher CCA (cold cranking amp) loads on big V6s, V8s and diesel 4WDs. At 4.5m long, they have that extra bit of length over your typical jumper leads, which always makes the difference when dealing with large 4WD engine bays. Fitted with a surge protector to protect sensitive electronics, and supplied in a handy clear plastic carry case. LEDs powered by built in batteries (included).

- Voltage surge protection
- 700A high current rating
- 8 x LR44 button batteries included
- 4.5m long



		CAT.	Qty 1+	Qty 3+	Qty 6+
700A	4.5m long	WH-6014	\$69.95	\$62.95	\$55.95

### 24VAC/DC TO 12VDC 1A CONVERTER

Trying to get power for CCTV and security cameras over a long run without losses is challenging to say the least. Solve the problem quickly and easily by sending 24VAC down the long run, then converting it to 12VDC when you get it where you need it. Connection is by screw terminals.



SPECIFICATIONS	MP-3350
Input	20 - 28VAC, 16 - 30VDC
Output	12VDC regulated
Output Current	1A max
Dimensions	90(L) x 25(W) x 25(H)mm

CURRENT (MAX.)	CAT.	Qty 1+	Qty 3+	Qty 6+
1A	MP-3350	\$39.95	\$35.95	\$31.95

## 24VDC TO 12VDC CONVERTERS

### 24VDC TO 12VDC 3A CONVERTER

Many trucks and boats use 24V systems. These converters will allow you to run a reasonably sized 12V car-stereo or other devices from a 24V supply. Heatsink (not included) should be used for superior performance.

- Short-circuit protection & thermal cutout

SPECIFICATIONS	AA-0266
Input Voltage	24 to 26 VDC
Output Voltage	12VDC
Maximum Load	3A
Dimensions	135 x 50 x 24 mm
Heatsink	50 x 100 x 30 mm (rec. size), use Cat. HH-8572 or similar

CURRENT (MAX.)	CAT.	Qty 1+	Qty 3+	Qty 6+
3A	AA-0266	\$29.95	\$26.95	\$23.95



### 24VDC TO 12VDC 5A CONVERTER WITH USB

Converts 24VDC to 12VDC so that you can use normal car accessories designed for 12V vehicles. With a cigarette lighter plug for 24V input and a cigarette lighter socket for the 12V output. Max rated current is 5A and also has a USB output with 1A current to charge your mobile phone etc.

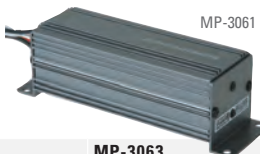
SPECIFICATIONS	MP-3354
Input Voltage	12 - 30VDC
Output Voltage	12VDC
Max, Output Current	5A
Continuous Output Current	4A
Efficiency	85%
Dimensions	100(L) x 76(W) x 38(H)mm



CURRENT (MAX.)	CAT.	Qty 1+	Qty 3+	Qty 6+
5A	MP3354	\$64.95	\$58.45	\$51.95

### 24VDC TO 12VDC CONVERTERS

DC to DC converters are useful for running 12V devices from a 24V supply in a truck or bus. These have switchmode technology for light weight & compact design.



SPECIFICATIONS	MP-3061	MP-3063
Current	10 Amp	20 Amp
Input Voltage	20 - 30VDC	20 - 30VDC
Output Voltage	13.8VDC	13.8VDC
Max, Output Current	10A	20A
Continuous Output Current	7A	15A
Efficiency	85%	85%
Dimensions	160(L) x 48(W) x 48(H)mm	210(L) x 90(W) x 50(H)mm

CURRENT (MAX.)	CAT.	Qty 1+	Qty 3+	Qty 6+
10A	MP-3061	\$74.95	\$67.45	\$59.95
20A	MP-3063	\$119.00	\$106.95	\$94.95

### 24VDC TO 12VDC 10A CONVERTER

Switchmode technology for light weight and compact design and are rated for 10A. Input and output is via cigarette lighter plug and socket.

SPECIFICATIONS	MP-3352
Input Voltage	20 - 30VDC
Output Voltage	13.8VDC
Max, Output Current	10A
Continuous Output Current	7A
Efficiency	85%
Dimensions	160(L) x 48(W) x 48(H)mm



CURRENT (MAX.)	CAT.	Qty 1+	Qty 3+	Qty 6+
10A	MP-3352	\$89.95	\$80.95	\$71.95

### 24VDC TO 12VDC 6A CONVERTER

Supplies a regulated 12VDC output at up to 6 amps, more than enough for a portable DVD player, TV, LCD screen or any other 12 volt device.

- Supplied with 7 DC connectors

SPECIFICATIONS	MP-3064
Input	11-28VDC
Output	Regulated 12VDC @ 6A
Lead Length	Input - 450mm, output - 1400mm
Case Size	138(L) x 60(W) x 32(H)mm



CURRENT (MAX.)	CAT.	Qty 1+	Qty 3+	Qty 6+
6A	MP-3064	\$69.95	\$62.95	\$55.95



## CAR POWER SUPPLIES

### 12VDC 1.2A CAR POWER ADAPTOR

Use your car's cigarette lighter socket to power or charge a variety of portable electronic devices such as mobile phones, personal audio players, handheld video game consoles and PDAs. Choose from 7 different DC voltages and 6 different adaptor tips.



SPECIFICATIONS	MP-3678
Input Voltage	12VDC
Output Voltage	1.5, 3, 4.5, 6, 7.5, 9 or 12VDC
Output Current	1.2A
Cable Length	1.8m
Dimension	99(L) x 55(W) x 45(D)mm

1 YEAR WARRANTY

CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
1.2A	MP-3678	\$19.95	\$17.95	\$15.70

### 12VDC 3A CAR POWER ADAPTOR WITH USB OUTLET

Select a DC voltage and adaptor tip combination to power or charge a wide range of consumer electronics goods such as personal audio players, digital cameras, handheld gaming consoles, mobile phones, PDAs, PSP, etc. Many modern devices will also charge via the USB outlet.



SPECIFICATIONS	MP-3671
Input Voltage	12VDC
Output Voltage	3, 4.5, 5, 6, 7.5, 9.5, 12VDC
Output Current	3A
USB Output	5VDC, 1A
Power Indicator	LED
Dimensions	80(L) x 76.2(W) x 33(D)mm

1 YEAR WARRANTY

CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
3A	MP-3671	\$29.95	\$26.90	\$23.70

See our range of In-Car & Cigarette Lighter Chargers on pages 347

### 12VDC 5A REGULATED CAR POWER ADAPTOR

This adaptor will power MP3 players, games, CD players, appliances or anything else that requires 5 - 12VDC at up to 5A. It's also fuse protected & includes four plug adaptors to suit most popular devices.

- Four plug adaptors
- Selectable voltage: 5, 6, 9 & 12VDC
- Fuse protected
- Lead length: 1400mm



1 YEAR WARRANTY

CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
5A	MP-3478	\$39.95	\$35.90	\$31.90

### 12VDC UNIVERSAL GPS CHARGER WITH DUAL USB OUTPUT

This very handy universal GPS charger not only works as a replacement for an original GPS charger, but having two USB outputs and higher output power offers a bonus - allowing you to charge both your GPS and your mobile phone (or other USB device) at the same time! With 2.1A available from each USB port, it has enough power for even the latest and greatest big screen GPS models, whilst still having enough power left over to charge a second USB device. Supplied with 1.2m USB charging lead and 6 replaceable connectors to suit most GPS models.

- Suitable for: TomTom, TomTom XL, Navman, Garmin, Magellan, Navigon, Falk, Mio, etc
- Input: 12-24VDC
- Output: 5VDC, 2.1A max per USB port (4.2A total)
- Dimensions: 100(L) x 42(W) x 25(H)mm



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 5+	Qty 10+
MP-3676	\$29.95	\$26.90	\$23.70

### 12 TO 5VDC POWER CONVERTER

Use this wiring kit to get rid of those unsightly and annoying power cables floating around your car dash that power your GPS, Dash cam or mobile device. Simply hardwire it to the 12V power fuse panel in your vehicle and plug the micro USB plug (micro USB adaptor also included) into the device you need to power. If your vehicle uses blade fuses then wiring can be made easier using our SF-5115 or SF-5125 blade fuse sockets, which patch into the fuse panel.

- Micro USB Plug (Mini USB adaptor included)
- 2.1A continuous current
- Cable length 1.3m



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1.3m	MP-3675	\$19.95	\$17.95	\$15.95

## USB - DC POWER LEADS

### 6 PLUG DC TO USB LEAD KIT

Handy DC to USB lead pack allows you to power up devices using 5V from a USB port. Includes 6 different size tips which include .35, 1.5, 1.7, 2.1, 2.5mm DC and 3.5mm Audio jack.

- Cable length: 1m



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1m	PP-1985	\$14.95	\$13.45	\$11.95

### UNIVERSAL USB STEP-UP POWER CABLES

Absolute genius! This adaptor provides you with 9 or 12V output from a common USB socket (usually 5V output). Useful for powering all sorts of 12V devices direct from a computer or other USB charging source. 12V @ 1A rated output. Includes 7 standard DC tips to suit your device. Note - your USB port must be equipped for high current charging (2.1A or greater). Some USB ports are 500mA rated. The device will work perfectly, but will not be able to provide the full 1A current at 9V.

- USB 5V step-up to 12V converter
- Supplied with 7 standard DC tips
- Ideal for powering routers, radios, modems, car DVD players, etc



NEW 2018

SPECIFICATIONS	PP-1976	PP-1978
Rated input	5VDC @ 2.5A	
Rated output	9VDC @ 1A	12VDC @ 1A
Operating temperature	-20° to 115°C	
Weight	41g	
Cable Length	700mm	

	CAT.	Qty 1+	Qty 3+	Qty 6+
9V Output	PP-1976	\$14.95	\$13.45	\$11.95
12V Output	PP-1978	\$14.95	\$13.45	\$11.95

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required - see website, T&C or Store Manager for details.



## Inverters:

Getting 230VAC to run small electrical appliances from your cars battery is easy with our range of general purpose inverters. We have models suitable for charging your laptop in the bush to running a microwave in a motor home. They have fan assisted cooling and electrical isolation for safety.

### Select Your Model: Inverters

	Wattage	Input	Waveshape	Solar Regulator	Surge	Input Connection	Page
MI-5127	150W	12V	Modified Sine		450W	Lighter Plug	398
MI-5128	150W	12V	Modified Sine		450W	Lighter Plug	398
MI-5130	150W	12V	Modified Sine		450W	Lighter Plug	399
MI-5131	200W	12V	Modified Sine		400W	Lighter Plug	398
MI-5726	200W	12V	Pure Sine		400W	Heavy Duty Screw-down Terminals	401
MI-5132	300W	12V	Modified Sine		1000W	Screw Terminals	399
MI-5134	400W	12V	Modified Sine		1200W	Screw Terminals	399
MI-5135	400W	24V	Modified Sine		1200W	Screw Terminals	399
MI-5728	400W	12V	Pure Sine		800W	Heavy Duty Screw-down Terminals	401
MI-5136	600W	12V	Modified Sine		1500W	Bolt Terminals	399
MI-5720	600W	12V	Pure Sine	20A	1200W	Heavy Duty Screw-down Terminals	401
MI-5138	800W	12V	Modified Sine		2000W	Bolt Terminals	399
MI-5140	1100W	12V	Modified Sine		2500W	Bolt Terminals	400
MI-5722	1000W	12V	Pure Sine	30A	2000W	Heavy Duty Screw-down Terminals	401
MI-5142	1500W	12V	Modified Sine		3500W	Bolt Terminals	400
MI-5724	1500W	12V	Pure Sine	30A	3000W	Heavy Duty Screw-down Terminals	401
MI-5710	2000W	12V	Pure Sine		4000W	Heavy Duty Screw-down Terminals	402
MI-5144	2000W	24V	Modified Sine		4500W	Bolt Terminals	400
MI-5718	2200W	24V	Pure Sine		4000W	Heavy Duty Screw-down Terminals	402

#### 150W CAN-SIZED POWER INVERTER WITH 2.1A USB OUTPUT

Fits in the car's cup holder, plugs into the cigarette lighter socket and outputs 30VAC to power a variety of 230VAC equipment from a battery charger to a laptop power supply. Also features a USB port with 2.1A output, allowing you to quickly charge many modern electronics gadgets, including power-hungry Tablets. It also features electrical isolation to prevent sudden mains voltage at your cigarette lighter socket.

- Powered by cigarette lighter socket adaptor
- Modified sine wave
- USB Output: 5VDC 2.1A
- Dimensions: 165(L) x 60(Dia.)mm



WARRANTY

USB Port

#### 150W CUP POWER INVERTER WITH 4.2A DUAL USB OUTPUT

Mains power in your vehicle has never been so convenient! Simply slip it into a spare cup holder, and plug in to a free cigarette lighter socket. You'll then have access to 150W of mains power, and dual 2.1A USB charging outlets, to keep everything charged and running. 450W peak power provides additional performance when required too. Perfect for laptop charging and small mains powered devices. Internal cooling fan and over-temp/over-current protection.

- Convenient mounting into cup holder
- 150W continuous mains power
- 2 x 2.1A USB charging outlets



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
150W 12VDC + USB	MI-5127	\$59.95	\$53.95	\$47.95

#### 200W INVERTER WITH 4 USB OUTLETS

Great for taking on a quick road or camping trip to recharge your laptop, phone, or some other piece of tech that usually needs a mains outlet. This inverter provides four USB sockets, and two mains sockets, and a cigarette lighter socket to boot!

No fuss, just plug and play!



WARRANTY

SPECIFICATIONS	MI-5131
Input Voltage	11-15VDC
Mains Output	200W Rated, 400W Peak
USB Ports	5VDC @ 4.2A (combination max)
Cigarette Lighter Socket	12VDC
AC Output	240VAC @ 50Hz Modified Sine Wave
Dimensions	236(W) x 78(D) x 42(H)mm
Cable Length	1m

	CAT.	Qty 1+	Qty 3+	Qty 6+
200W 12VDC + 4 x USB	MI-5131	\$99.95	\$89.95	\$79.95

SPECIFICATIONS	MI-5128
Output power	150W
Output Power Peak	450W
AC Output voltage	240V
Output Wave form	Modified Sine Wave
DC Input Voltage	10-15V
Low Battery Shutdown	9.5±0.5V
High Battery Shutdown	>15V
Frequency	50Hz
No Load Draw	<0.5A
USB Output	2 X 5VDC @ 2.1A (each port), Total: 4.2A
Weight	339g
Cable Length	740mm
Dimensions	75(W) x 140(H) x 75(D)

	CAT.	Qty 1+	Qty 3+	Qty 6+
	MI-5128	\$59.95	\$53.95	\$47.95

## Compact Modified Sine Wave Inverters:

These convenient mains inverters are compact and easy to store. They're designed to provide you with basic mains-charging, laptop charging, and other low-power mains applications. They boast all the safety features you need like overload and input reverse polarity protection, and are plug

and play via your vehicle or boat cigarette lighter / charging socket. Perfect for charging small appliances.

- Overload protection
- Input reverse polarity protection



MI-5130



MI-5132



MI-5134



MI-5135



MI-5136



MI-5138



SPECIFICATIONS	MI-5130	MI-5132	MI-5134	MI-5135	MI-5136	MI-5138
Output Power	150W (450W Surge)	300W (1000W Surge)	400W (1200W Surge)	400W (1200W Surge)	600W (1500W Surge)	800W (2000W Surge)
DC Input Voltage		10-15VDC		20-30VDC		10-15VDC
AC Waveform			Modified Sine Wave			
AC Output			230VAC @ 50Hz			
USB Power Output			5VDC @ 2A (max)			
Low Battery Alarm		10.5±0.5V		21±1.0V		10.5±0.5V
Low Battery Shut Down		10.0±0.5V		20±1.0V		10.0±0.5V
High Battery Shut Down		15.5±1.0V		30±1.0V		15.5±1.0V
No Load Current	<0.4A	<0.4A	<0.3A	<0.3A	<0.7A	<1.0A
Over Temp. Protection			60°C ± 5°C			
DC Input Fuse	15A	30A	40A	25A	2 x 30A	3 x 30A
Weight	740g	830g	850g	850g	1.16kg	1.5kg
Dimensions	171(D) x 105(W) x 60(H)mm	182(L) x 105(W) x 60(H)mm	182(L) x 105(W) x 60(H)mm	182(L) x 105(W) x 60(H)mm	230(W) x 150(H) x 75(D)mm	261(L) x 105(W) x 60(H)mm

OUTPUT POWER	INPUT VOLTAGE	CAT.	Qty 1+	Qty 3+	Qty 6+
150W (450W)	12VDC	MI-5130	\$59.95	\$53.95	\$47.95
300W (1000W)	12VDC	MI-5132	\$79.95	\$71.95	\$63.95
400W (1200W)	12VDC	MI-5134	\$89.95	\$80.95	\$71.95
400W (1200W)	24VDC	MI-5135	\$89.95	\$80.95	\$71.95
600W (1500W)	12VDC	MI-5136	\$139.00	\$124.95	\$110.95
800W (2000W)	12VDC	MI-5138	\$209.00	\$187.95	\$166.95

## WHAT TO BUY - SINE WAVE OR MODIFIED SINE WAVE? TECH TALK

"Modified" sine wave is a crude approximation of the 240V waveform, with square wave components in it. Many appliances are OK with this.

**Typically these are :**

- All incandescent lighting
- Most switchmode power supplies
- Most TVs, VCRs CD/DVD players
- Small power tools
- Fax machines
- Some audio equipment
- Computers (most)
- All incandescent lighting
- Most switchmode power supplies

Sine wave is closer to mains and those inverters are much more efficient. Most appliances work OK with the lower cost modified sine.

**Sine wave inverters are best for:**

- Electric clocks
- Sensitive equipment
- Electronic weighing machines
- Mains powered PA equipment
- All other TVs
- Plug pack powered equipment
- Anything where you want to get the most out of a battery charge



## High Power Modified Sinewave Inverters:

Get power on the GO! This heavy duty 1100W Modified Sine Wave Power Inverter connects directly to a 12 Volt DC battery to power hand held power tools, televisions, gaming consoles, home electronics and small appliances in your car, truck, boat or RV. The dual 2.1 amp USB ports allow you to charge your cell phones, iPhone®, iPad®, or any other USB product. The artificial cooling design keeps the heavy duty aluminium casing cool. This unit also features an LCD display, which displays the output wattage or input voltage and battery level. With this inverter, you will never be left without power when you need it! Comes with a convenient 2-year warranty!

- LCD Display
- Dual USB port
- Remote control
- Thermal fan
- Short circuit / Overload protection
- Over temperature protection
- Under voltage / Over voltage protection



SPECIFICATIONS	MI-5140	MI-5142	MI-5144
AC Waveform		Modified Sine Wave	
DC Input Voltage		10.5-15.5VDC	
Output Power	1100W (2200W Surge)	1500W (3000W Surge)	2000W (4000W Surge)
AC Output		230V @ 50Hz	
USB Power Output		5VDC @ 2.1A (shared, Dual Port)	
Over Voltage Protection		16.0±0.3V	
Over Voltage Recovery		13.5±0.2V	
Under Voltage Protection	10.5±0.3V	10.5±0.3V	10.3±0.3V
Under Voltage Recovery		12.0±0.3V	
Efficiency at Normal Power	≥82%	≥84%	≥85%
Standby Current	<0.6A	<0.6A	<0.9A
Overload Protection	1250W±50W, Shut down	1650W±50W, Shut down	2200W±100W, Shut down
Short Circuit Protection		Shut down	
Accessories		Battery Cables, Fuse, Remote Control	
Weight	2.11kg	2.3kg	3.26kg
Dimensions	274(L) x 194(W) x 88(H)mm	326(L) x 194(W) x 88(H)mm	366(L) x 194(W) x 88(H)mm

POWER OUTPUT	VOLTAGE INPUT	CAT.	Qty 1+	Qty 3+	Qty 6+
1100W (2200W)	12VDC	MI-5140	\$279.00	\$249.00	\$219.00
1500W (3000W)	12VDC	MI-5142	\$399.00	\$359.00	\$319.00
2000W (4000W)	12VDC	MI-5144	\$549.00	\$489.00	\$439.00

### Tech Talk: When To & When Not To Use Inverters

We DO NOT recommend that you use these products to operate the following:

- FRIDGES • AIR COMPRESSORS • AIR CONDITIONERS

An inverter is a device which converts 12 or 24VDC into 240VAC. The 240VAC generated is as lethal as the power in homes, and should be treated with the same respect. Inverters can be easily damaged, and connecting the input voltage terminals the wrong way around on the battery can damage the unit - be careful!!

Appliances most suitable for connection include:

- most power tools
- most TVs
- most computers
- most audio equipment
- lights
- video recorders / players
- fax machines

Fluorescent lights can give a highly inductive load on start up which can damage inverters. Appliances not suitable include:

- electric blankets
- hair dryers
- radiators
- toasters
- irons
- heavy power tools (large angle grinders, circular saws etc)

Inverters will generally drive inductive loads such as electric motors, but only if the startup current is not high. Generally high startup current situations are when the motor is permanently coupled to a load such as a refrigeration or airconditioner compressor (Imagine the compressor at rest just before top dead centre you can easily realise the start up load on the motor!). Many other motors such as in drills, small angle grinders, buffers etc start up under virtually no load and this is usually OK for the inverter provided the tool is within the inverter rating. It needs to be pointed out that one of the major differences between a domestic power point and inverter is that the source impedance of a power point is very low compared to the inverter. This is why inverters have trouble with appliances with high start up currents and a domestic power point does not. Another thing that must be remembered is the special case of fluorescent lights with ballast chokes in them (by far the most common type). Manufacturers of fluoro lights assume that they are just going to be installed to a normal 240V 50Hz sine wave supply. They are required to supply a product that does not overly distort the mains waveform. They generally comply with this by installing a, say, 3.3µF non polarised capacitor across the mains/neutral supply inside the housing of the lamp fitting. This is called a power factor correction capacitor. This seems to work OK for a sine wave supply from a low source impedance. When you drive such a device with modified sine wave 240V power, different things start to happen. The power factor correction capacitor presents a much greater load to a modified sine wave signal (which is a complex collection of high and low frequencies) than it would if it was a sine wave. The bottom line is to reduce this capacitor to about 0.47µF or take it out completely. Inverters are generally OK then. It is also possible for an inverter to be damaged by the surges in current generated when using standard fluorescent starters. This can be prevented by replacing the starter with an electronic starter.

## INVERTERS - PURE SINE WAVE RANGE

These two models are designed to handle a high peak power and surge to power large devices that have high initial current demands. They also feature over and under voltage protection, and high temperature protection that switches the inverter off automatically, and then switches

back on again once suitable operating levels return. There is a USB port with 2.1A fast charging output to charge your Smartphone, Tablet and other USB devices. All built within a sturdy housing, design is built to last.

SPECIFICATIONS	MI-5726	MI-5728
Output Power Continuous	200W	400W
Output Power Peak	270W (10min)	450W (10min)
Output Power Surge	400W (1sec)	800W (1sec)
Current In Standby Mode	<750mA	<1000mA
Input Voltage	10.5-15.3VDC	10.5-15.3VDC
Output Wave Form	Pure sine wave	Pure sine wave
Efficiency	>86%	>86%
Output Regulation	±5%	±5%
Output Frequency	50Hz	50Hz
USB Output	5VDC 2.1A	5VDC @ 2.1A
Dimensions	189(L) x 100(W) x 60(H)mm	213(L) x 100(W) x 60(H)mm
Weight	702g	870g
Input Connection	Removable alligator clamps	Heavy duty screw terminals
Output Overload	Beeps 3 times & LED flashes	Beeps 3 times & LED flashes
Thermal Alarm & Shutdown	>70°C	>70°C
Battery Low / High Shutdown	10.5VDC / 15.3VDC	10.5VDC / 15.3VDC



**POWERTECH**



		CAT.	Qty 1+	Qty 3+	Qty 6+
200W	12VDC	MI-5726	\$199.00	\$178.95	\$158.95
400W	12VDC	MI-5728	\$299.00	\$269.00	\$239.00

## INVERTERS - PURE SINE WAVE WITH BUILT-IN SOLAR REGULATORS

A truly versatile inverter range that is perfect for off-grid solar power systems in caravans, yachts, holiday houses, outback shed, and any standard application where inverters are used. The built-in solar charge controller means you can connect solar panels (without regulator) directly to the inverter to recharge suited batteries or battery banks. This is achieved by a single battery connection to the inverter that allows a charge and draw simultaneously or independently. The pure sine wave AC

output makes them suitable to power most mains appliances within their continuous power output. Features include reverse polarity, battery over/under voltage, overload and over temperature protection as well as 2 x 230VAC mains outlets, two USB ports and an LCD on the unit and a remote control that provides important information such as Battery Voltage, DC Input Current, Output Power, Battery Level and DC Charging Current.

600W



MI-5720

1000W



MI-5722

1500W



MI-5724

**FOR SUITABLE SOLAR PANELS  
WE RECOMMEND 2 X ZM-9059  
12V 150W PANELS IN SERIES**



Supplied with remote



Rear shot

**POWERTECH**

SPECIFICATIONS	MI-5720	MI-5722	MI-5724
Output Power Continuous	600W	1000W	1500W
Output Power Surge	1200W	2000W	3000W
Standby Current	750mA	750mA	750mA
Input Voltage	12VDC	12VDC	230VAC
Output Voltage	230VAC	230VAC	12VDC
Output Wave Form	Pure sine wave	Pure sine wave	Pure sine wave
Efficiency	>90%	>90%	>90%
Output Regulation / Frequency	±3% / 50Hz	±3% / 50Hz	±3% / 50Hz
2 X USB Ports Output	5VDC, 1A + 2A	5VDC, 1A + 2A	5VDC, 1A + 2A
Battery Connection	Heavy duty screw terminals	Heavy duty screw terminals	Heavy duty screw terminals
Solar Charge Controller Load Current	20A max	30A max	30A max
Protections	Reverse polarity, battery over/under voltage, output short circuit, overload, over temperature		
Dimensions	297(L) x 204(W) x 102(H)mm	379(L) x 204(W) x 102(H)mm	429(L) x 204(W) x 102(H)mm
Weight	2.4kg	3.2kg	3.6kg



WARRANTY

			CAT.	Qty 1+	Qty 3+	Qty 6+
600W	12VDC	20A Regulator	MI-5720	\$399.00	\$359.00	\$319.00
1000W	12VDC	30A Regulator	MI-5722	\$599.00	\$539.00	\$479.00
1500W	12VDC	30A Regulator	MI-5724	\$799.00	\$719.00	\$639.00

## INVERTERS - PURE SINE WAVE RANGE FOR TRUCK (24V) & HIGH CURRENT

### 2000W PURE SINE WAVE INVERTER

This inverter includes advanced control logic which provides standard protection (overload, high temperature, over/under input voltage, and output short circuit) as well as a host of additional features to provide improved performance and reliability under adverse conditions. The control logic checks inverter and load conditions at start-up before applying power. It also applies a soft start feature which near eliminates the risk of inverter overload when large appliances with high in-rush currents are used. Overload detection and prevention uses a three stage alarm which acts as a timed warning so you can decrease the load before the inverter completely shuts down. High temperature protection automatically shuts the inverter down when it reaches a predetermined temperature, then restarts once the temperature has dropped to a lower level. A power saving mode can also be activated to minimise battery drain when the AC output falls below a set power threshold; ideal for use on small appliances such as entertainment equipment. When the threshold is reached the inverter is switched to standby substantially decreasing the standby current draw. This range includes models suitable for a variety of mobile and permanent power installations. Each model has been rigorously tested (and we MEAN rigorously tested!) to ensure the best performance for your application. All models feature a standard 230VAC mains outlets as well as a USB port for powering and charging USB devices.

**POWERTECH**



SPECIFICATIONS	MI-5710
Output Power Continuous	2000W
Output Power Surge	4000W
Current At No Load	-
Current In Standby Mode	1800mA
Power Saving Mode Options	-
Input Voltage	12VDC
Output Wave Form	Pure sine wave
Efficiency	>90%
Output Regulation	<+/-3%
Output Frequency	50Hz
Usb Output	5VDC +/-5% 500mA
Dimensions	520(L) x 200(W) x 88(D)mm
Weight	5.5kg
Input Connection	Heavy duty screw terminals
Remote Control	-
Output Overload	Shutdown
Thermal Alarm And Shutdown	60°C +/-4°C
Thermal Shutdown Restart	-
Battery Low Alarm	10.5VDC +/-0.5VDC
Battery Low Shutdown	10VDC +/- 0.5VDC
High Battery Alarm	16VDC +/- 0.5VDC
Input Protection	-
Short Circuit	Shutdown
Battery Reverse	Internal fuse



	CAT.	Qty 1+	Qty 3+	Qty 6+
2000W 12VDC	MI-5710	\$999.00	\$899.00	\$799.00

### 2200 WATT 24VDC TO 230VAC PURE SINE WAVE INVERTER WITH 30A SOLAR REGULATOR

This fantastic quality pure sine wave inverter will run all sorts of appliances. Pure sine wave mirrors traditional grid power, providing a more stable power source. But this is so much more than just an inverter. It features a fully integrated 30A solar charger! That means you can connect your solar panels directly to this unit, for a total solar / charge / mains power solution - perfect for off-grid or travel. Designed to run using a 24V battery bank, it's suitable for use with up to 500W of solar panels. With the handy included remote control, you can easily monitor functions while the main unit is tucked away somewhere practical. The remote displays solar charge status, battery charge or discharge status, battery charge level, power output level, and more. The dual mains outlets are very handy, as are two USB charging outlets for all those recharging needs! This is a very simple to install solution that will provide years of reliable service.

- Built-in 30A PWM solar controller with remote control
- Dual mains socket
- Dual USB 1A+2A



SPECIFICATIONS	MI-5718
Battery Requirements	Battery Voltage: 18-31VDC Battery Capacity: ≥65Ah Recommended Maximum Input Current: 120A Standby Current: ≤0.75A
Solar Charge Input	PV Voltage: 32-45VDC Maximum Solar Power: 500W Maximum Solar Current: 30A Solar Charge Controller Type: PWM
AC Specifications	Voltage Output: 230VAC Frequency: 50Hz Power: 2200W Max Peak Power: 2500W @ 20 Minutes Surge Peak Power: 4000W @ 1 Second Voltage Harmonics: ≤5% Conversion Efficiency: ≥90%
USB Output	Output Voltage: 5VDC Maximum Output Current: 3A Combined
Operating Temperature	-20°C - 50°C
Dimensions	400(D) x 200(W) x 100(H)mm
Weight	4.7kg

	CAT.	Qty 1+	Qty 3+	Qty 6+
2200W 24VDC	MI-5718	\$999.00	\$899.00	\$799.00

## INVERTER GENERATORS

### 2KW SINE WAVE INVERTER GENERATOR

Cheap petrol generators can produce very dirty mains power - a disaster for precision electronics or any sensitive equipment. This unit comprises of a 4-stroke petrol engine, a low voltage electrical generator, and a pure sine wave inverter to give you clean mains power. This method provides a level of stability not possible in cheaper units. It's also intelligent, with an auto-throttling switch to increase and decrease motor speed to compensate for power demand. Of course you can override this to provide more stable power, at the expense of efficiency. With the addition of a parallel-link cable, you can stack two compatible units together. Join it with another 2kW unit for 4kW total output. This stacking ability provides the ultimate in flexibility when you need a lot of power. A full house of protections including overload and low oil automatic shutoff. A simple pull start keeps things simple, making every start a breeze. Housed in a rugged moulded case with integrated carry handle.

- Pure sine wave output
- Parallel stacking option
- Rugged and reliable
- 106cc, single cylinder, air cooled, 4-stroke petrol

*Note: Not regularly stocked in all retail outlets. Please call ahead to verify stock availability and/or place a customer order.*

**An extensive range of spare parts are available online or by special order in-store**



SPECIFICATIONS	MG-4508
Max Engine Power	2.2kW @ 4800RPM
Fuel Tank Capacity	3.7L
Fuel Consumption	420g/kWh
Running Time	3.8 hours at full power
Noise	91dB
Dimensions	532(L) x 300(D) x 461(H)mm
Weight	23kg (dry)



	CAT.	Qty 1+	Qty 2+	Qty 4+
2kW	MG-4508	\$899.00		
ACCESSORIES	CAT.	Qty 1+	Qty 2+	Qty 4+
Parallel Link Cable	MG-4509	\$39.95	\$37.95	\$35.95



## WIND TURBINE GENERATORS

When solar panels started to come down in price, wind turbine generators ceased to remain competitive! Wind turbines, however, are still a great option where you need a lot of generating power and don't have room for large solar arrays. Indeed, the two generators below are cheap compared to large solar panel arrays. They are very rugged and made to marine salt water corrosion resistance specifications and will last a long time.

### Two models are available:

Both units have stainless steel shafts, fasteners and marine grade bearings. The housings are cast aluminium, powder coated marine grade. Both models have a built-in microprocessor based controller with peak power tracking. The 500W unit will generate power at 12VDC or 24VDC (switchable) and in keeping with the high power the larger unit provides power at 48VDC. They mount with a simple 48mm schedule 40 pipe. (Pipe supplied by installer.)

### 500 WATT

This unit that has a 1.2m rotor fan and achieves full power at only 31mph (50km/h) and will produce useful power at 7mph (12km/h). The unit will withstand wind speeds to 110mph (177km/h).

### 2 KILOWATT

The larger unit has blades 1.78m diameter and will give full rated power at 72km/h but still 1,000 watts at a wind speed of only 45km/h.



Both units are warranted for 3 years from faulty materials or workmanship. Mounting mast and guying hardware available separately.

*\*Note: 2kW not stocked at all stores but can be specially ordered. Call store for details.*

...a great option where you need a lot of generating power and don't have room for large solar arrays

SPECIFICATIONS	MG-4550	MG-4552
Wind Turbine Type	Horizontal axis, up-wind	Horizontal axis, up-wind
Rotor Diameter	1.2m	1.776m
Weight	6.7kg	18kg
Mount Diameter	48.6mm	48.6mm
Number Blades	3	3
Blade Material	Carbon fibre	Carbon fibre
Body Material	Aluminum diecast	Aluminum diecast
Generator	Permanent magnet brushless	Synchronous-type, three phase power generator with neodymium iron boron magnets
Controller	Built-in MPPT controller	Built-in MPPT controller
Start-Up Wind Speed	3.1m/s	3m/s (11km/h)
Cut-Out Wind Speed	14m/s	20m/s (72km/h)
Survival Win Speed	49.2m/s	49.2m/s (177 km/h)
Rated Power	500W at 14m/s	1KW (12.5m/s, 45km/h)
Rated Rotor Speed	1400rpm	1000rpm
Peak Power	500W at 14m/s	2KW (20m/s, 72km/h)
Output Voltage	12VDC or 24VDC dual voltages	48VDC
Braking System	Regenerative electromagnetic braking system	Regenerative electromagnetic braking system
Recommended System	Deep cycle battery 200Ah or more	Deep cycle lead acid battery 420Ah or more



WARRANTY

VOLTAGE	POWER/PEAK POWER	CAT.	Qty 1+	Qty 2+	Qty 4+
12/24VDC	500W	MG-4550	\$749.00	\$669.00	\$599.00
SPARE PARTS					
Internal Controller Spare suit MG4550		MG-4553	\$275.00	\$245.00	\$215.00
Display Box Spare suit MG4550		MG-4555	\$199.00	\$178.95	\$158.95
Nosecone Spare suit MG4550		MG-4551	\$25.00	\$22.45	\$19.95
Blades Spare suit MG4550		MG-4554	\$250.00	\$220.00	\$200.00
Alternator Spare suit MG4550		MG-4556	\$320.00	\$280.00	\$250.00
RS1 Resistance Wire Suit MG4550		MG-4561	\$2.00	\$1.80	\$1.60
VOLTAGE	POWER/PEAK POWER	CAT.	QTY 1+		
48VDC	2000W	MG-4552*	\$2,999.00		
SPARE PARTS					
Nosecone Spare suit MG4552		MG-4557	\$69.95	\$62.95	\$55.95
Blades Spare suit MG4552		MG-4559	\$840.00	\$750.00	\$670.00
50MM To 32MM Adapter Sleeve Suit MG4550		MG-4563	\$4.95	\$4.45	\$3.95
Internal Controller Spare suit MG4552		MG-4558	\$840.00	\$750.00	\$670.00

## Powertech Monocrystalline Solar Panels:

These high performance monocrystalline solar panels are much smaller, thinner, higher in efficiency and more affordable than our previous models. The manufacturing process for this range uses 36 pieces of 156x156mm A-grade solar cells cut into defined sizes with 4 grid lines, which provides excellent performance under low light environments. Each panel is designed to withstand harsh environmental conditions with a durable anodised aluminium frame and 3.2mm low iron tempered

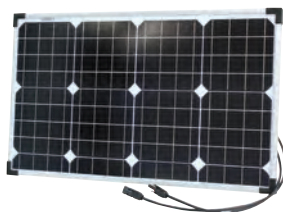
glass. The glass is anti-reflective and has a hydrophobic effect to resist dirt and dust, improving light absorption thereby preventing any needless power loss. The junction box and bypass diodes stops the panel from overheating and suffering from the "hot spot effect". The entire range is easier to install with minimal ongoing maintenance and compatible with industry standard inverters and mounting systems.

### 25 YEAR LIMITED WARRANTY

All Powertech monocrystalline solar panels are covered by a 25 year limited warranty. This warranty covers the panels for defects in construction and manufacturing for a period of 5 years, and warrants that the electrical output will remain above 80% of its original rated output for a period of 25 years.

#### 40W

ZM-9056



#### 80W

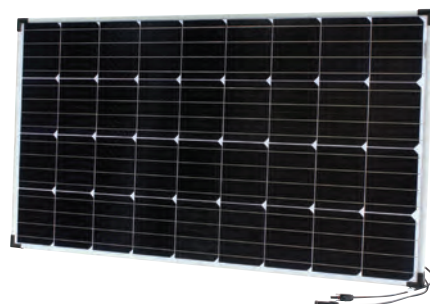
ZM-9057



## POWERTECH

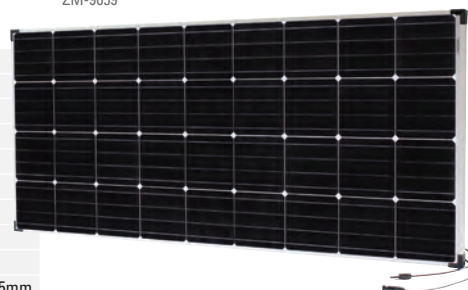
#### 120W

ZM-9058



#### 150W

ZM-9059



SPECIFICATIONS	ZM-9056	ZM-9057	ZM-9058	ZM-9059
Maximum Power (Pmax)	40W	80W	120W	150W
System Output Voltage	12V	12V	12V	12V
Open Circuit Voltage (Voc)	21.5V	21.6V	21.7V	22.4V
Short Circuit Current (Isc)	2.5A	4.90A	7.08A	8.66A
Voltage At Max Power (Vmp)	17.2V	17.6V	17.6V	18.1V
Current At Max Power (Imp)	2.33A	4.55A	6.8A	8.31A
Termination	MC4 Plug	MC4 Plug	MC4 Plug	MC4 Plug
Cable Length	900mm	900mm	900mm	900mm
Dimensions	661 x 402 x 25mm	755 x 661 x 25mm	1179 x 664 x 35mm	1469 x 664 x 35mm

VOLTAGE	WATTAGE	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	40W	ZM-9056	\$99.95	\$94.95	\$89.95
12V	80W	ZM-9057	\$179.00	\$169.95	\$160.95
12V	120W	ZM-9058	\$249.00	\$229.00	\$219.00
12V	150W	ZM-9059	\$299.00	\$279.00	\$269.00

### ✓ PORTABLE SOLAR PANELS

#### HIGH EFFICIENCY MONOCRYSTALLINE SOLAR PANEL CHARGERS

Quality solar panels with high efficiency and smaller footprint compared to our regular monocrystalline models. An easy way to keep your 12V batteries topped up and ready to go on your caravan, farm equipment, the spare car, or on the shed out the back. The dust and weather resistant panel features a robust frame, and is supplied with 3m long leads terminated with battery clips. Each version is fitted with a blocking diode, so they are suitable for direct connection to your battery as a trickle charger (take note of the minimum battery capacity), or as a low current charger to replace a load or current drain on the battery. A charge controller such as AA-0348 is recommended on the 10W and 20W versions when there is not enough current drain to prevent over-charging of the battery.

- 5 year warranty against materials and workmanship, and 20 year warranty for power output no less than 80%

SPECIFICATIONS	ZM-9050	ZM-9051	ZM-9052
Maximum Power (Pmax)	5W	10W	20W
Rated Voltage	12V	12V	12V
Voltage At Pmax (Vmp)	17.4V	17.4V	17.4V
Current At Pmax (Imp)	290mA	580mA	1.16A
Open Circuit Voltage (Voc)	21.8V	21.8V	22.0V
Short Circuit Current (Isc)	310mA	610mA	1.21A
Min. Battery Capacity	50Ah	100Ah	200Ah
Weight	0.67kg	1.15kg	2.5kg
Dimensions	251(W) x 205(H) x 18(D)mm	385(W) x 253(H) x 30(D)mm	520(W) x 360(H) x 30(D)mm



ZM-9051



ZM-9050



ZM-9052



WARRANTY

VOLTAGE	WATTAGE	AMPS (MAX.)	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	5W	290mA	ZM-9050	\$29.95	\$28.45	\$26.95
12V	10W	580mA	ZM-9051	\$49.95	\$46.95	\$44.90
12V	20W	1.16A	ZM-9052	\$79.95	\$75.95	\$71.95

## ✓ FOLDING SOLAR PANELS

### POWERTECH 12V 100W FOLDING SOLAR PANEL WITH 5M LEAD



If you're looking for a convenient and portable power solution, the Powertech 12V 100W Folding Solar Panel is the perfect choice! It is an entire solar power system incorporated into one compact package. Made with the most efficient monocrystalline solar cells on offer, this unit weighs a mere 8kgs. This product includes two 50 Watt Monocrystalline Solar Panels, one 10 Amp PWM solar Charge Controller with LED indicators for power regulation, 5m extension lead with Anderson connectors, additional extension leads (Anderson to eye terminals and Anderson to Alligator Clips) for easy connections and a heavy duty bag for safe portability. If you are looking for a portable solar solution and permanent mounting is not for you, then this the perfect kit for you! Equipped with a carrying handle, durable fold out legs that allow for varying degrees of tilt, and industry standard latches this solution with be your new best friend for on the go!

- Adjustable, corrosion-resistant aluminium stand and frame with heavy duty handle and latches for longevity
- 12V 10A PWM Solar charge controller compatible with gel, sealed, and flooded batteries
- Portability with Easy carry case
- Excellent value with various types of Battery leads (Eye terminals, Alligator clips, Anderson) provided



SPECIFICATIONS	ZM-9174
Type	Mono Crystalline Solar Cells
Peak Power	100W
Rated Voltage	12V
Voltage @ Peak Power	17.8V
Current @ Peak Power	5.62A
Open Circuit Voltage	22.50V
Short Circuit Current	6.18A
Panel Dimensions	665(L) x 1070(W) x 35(H)mm (open) 665(L) x 545(W) x 75(H)mm (closed)
Gross Weight	8kgs

VOLTAGE	WATTAGE	LEAD	CAT.	Qty 1+	Qty 2+	Qty 4+
12V	100W	5m	ZM-9174	\$249.00	\$229.00	\$219.00

### 12V 120W FOLDING SOLAR PANEL WITH 5M LEAD

Unfolds in seconds to provide up to 10A charging current in full sun. Integrated stands allow positioning with a premium angle to the sun. It provides a built-in charge controller and 5m lead to charge your battery without any additional hardware. When you're done, fold it back in half and pack it away. The solid aluminium frame is lightweight, yet strong. It will provide years of faithful service.

- Aluminium Frame
- Built-In 10A Charge Controller
- Includes Carry Case



**POWERTECH**

VOLTAGE	WATTAGE	LEAD	CAT.	Qty 1+	Qty 4+
12V	120W	5m			

### POWERTECH 12V 160W FOLDING SOLAR PANEL WITH 5M LEAD



If you're hungry for power yet looking out for a portable power solution, the Powertech 12V 160W Folding Solar Panel is the answer! A comprehensive solar power system made with top grade monocrystalline solar cells, this unit will bail you from most power crisis. This product includes two 80 Watt Monocrystalline Solar Panels, one 10 Amp PWM solar Charge Controller with LED indicators for power regulation and USB port, 5m extension lead with genuine Anderson connectors, additional extension leads (Anderson to eye terminals and Anderson to Alligator Clips) for easy connections and a heavy duty bag for safe portability. If you are looking for a portable solar solution with fast and easy installation then this the perfect kit for you! Equipped with a carrying handle, durable fold out legs that allow for varying degrees of tilt and industry standard latches this is the ultimate solution!

- Adjustable, corrosion-resistant aluminium stand and frame with heavy duty handle and latches for longevity
- 12V 10A PWM Solar charge controller compatible with gel, sealed, and flooded batteries
- Portability with Easy carry case
- Excellent value with various types of Battery leads (Eye terminals, Alligator clips, Anderson) provided



SPECIFICATIONS	ZM-9178
Type	Mono Crystalline Solar Cells
Peak Power	160W
Rated Voltage	12V
Voltage @ Peak Power	18.0V
Current @ Peak Power	8.88A
Open Circuit Voltage	22.30V
Short Circuit Current	9.19A
Panel Dimensions	1335(W) x 759(H) x 35(D)mm (open) 665(W) x 759(H) x 75(D)mm (closed)
Gross Weight	15.5 kgs

VOLTAGE	WATTAGE	LEAD	CAT.	Qty 1+	Qty 4+
12V	160W	5m	ZM-9178	\$399.00	\$378.00



SPECIFICATIONS	ZM-9176
Type	Mono Crystalline Solar Cells
Peak Power	120W
Rated Voltage	12V
Voltage @ Peak Power	17.6V
Current @ Peak Power	6.8A
Open Circuit Voltage	21.6V
Short Circuit Current	7.08A
Panel Dimensions	664(L) x 1270(W) x 35(H)mm (open) 664(L) x 631(W) x 75(H)mm (closed)
Gross Weight	12kg

CAT.	Qty 1+	Qty 4+
ZM-9176	\$299.00	\$279.00





## ✓ FLEXIBLE SOLAR PANELS

### 100W SEMI-FLEXIBLE 12V SOLAR PANEL

These monocrystalline solar panels can be easily mounted on the curved surfaces of your boat deck or caravan to charge on-board batteries. The flexibility of the solar cells is limited by the plastic base but will easily bend on the long axis to accommodate a yacht deck or RV roof. It is slightly flexible on the short axis. Best of all, these units do not have a heavy rigid frame and are therefore light, and easy to stow away when you travel. The solar cells are implanted in very distinctive and highly resilient polymers that give durability. The flexible non-glass area of the solar panel is tough enough to walk on. We recommend that you add a solar charge regulator to charge the batteries more effectively.

- Maximum recommended bending degree: 20°

SPECIFICATIONS	ZM-9155
Max Power (Pmax)	100W
Rated Voltage	12V
Open Circuit Voltage (Voc)	21.6V
Short Circuit Current (Isc)	5.97A
Max Power Voltage (Vmp)	17.8V
Max Power Current (Imp)	5.62A
Cable Length	2 x 850mm
Dimensions	1100(L) x 570(W) x 2.5(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
100W	ZM-9155	\$349.00	\$329.00	\$309.00



Check out our Folding Solar Panels on page 405

## Tech Talk: Application Guide For Semi-Flexible Solar Panels

Our semi-flexible solar panels are an excellent option for boats, campervans, caravans or camping power setups, as they are a lot lighter and less bulky than their standard solar panel equivalent (only 3mm thick versus 27-35mm thick). Their main structure is a sheet of aluminium alloy material that is flexible, allowing you to bend the panel slightly to follow the curves of your mounting surface for a slimline installation.

### LIGHTWEIGHT FOLDUP SOLAR PANELS WITH CARRY BAG

While these solar cells aren't technically flexible, as a whole they use a combination of either 4 or 8 panels, providing versatile mounting and transport options. Keep them folded when not in use in the included carry bags, they are extremely compact. When you want to use them, simply unfold and lay in the sun! A charge controller is included, so you can connect directly to a battery without any additional hardware. The charge controller includes a 1.2A USB charging outlet, perfect for charging mobile phones and other devices in an emergency. Built with high grade monocrystalline solar panels, they're durable with great output for their size. A 50W and 100W output model is available.

- Folds into canvas bag
- Includes solar controller & battery clamps
- 3m lead with battery clamps

SPECIFICATIONS	ZM-9166	ZM-9168
Solar Cell Type	Mono Crystalline 156 x 156mm	Mono Crystalline 156 x 156mm
Power Output	50W	100W
Open Circuit Voltage	21.6VDC	21.6VDC
Short Circuit Current	2.97A	5.94A
Working Voltage	18VDC	18VDC
Working Current	2.78A	5.55A
Folded Size	325(W) x 360(H) x 30(D)mm	340(W) x 380(H) x 80(D)mm
Unfolded Size	325(W) x 1610(H) x 4(D)mm	664(W) x 1720(H) x 6(D)mm
Weight	2.76kg	5.18kg



VOLTAGE	WATTAGE	AMPS (MAX.)	CAT.	Qty 1+
12V	50W	2.78A	ZM-9166	\$199.00
12V	100W	5.55A	ZM-9168	\$399.00

### 12V BATTERY SOLAR TRICKLE CHARGER 1.5W

Perfect for keeping your boat, classic car, tractor, or any other infrequently used vehicle battery topped up. It includes battery clips and a cigarette lighter socket for simple connection, which a discharge diode prevents any drain on your battery at night. Provides up to 1.5W charging power, which is plenty to prevent idle discharge of your expensive vehicle battery.

- Ideal for maintaining the battery of an infrequently used vehicle
- Cigarette lighter / battery clip option
- No configuration required



SPECIFICATIONS	MB-3504
Power Rating	1.5W
Solar Panel	17.5V
Current	107mA
Weight	470g
Dimensions	125(W) x 335(H) x 20(D)mm
Cable Length	2.5m

	CAT.	Qty 1+	Qty 2+	Qty 4+
	MB-3504	\$29.95	\$26.95	\$23.95



### SOLAR WATER PUMPS

Run your outdoor aquarium, garden pond or water feature from the sun, eliminating the need for wiring or the safety aspects of electricity near water. This multi-application Powertech solar powered water pump comes with its own solar panel, cable and pump assembly ready to go. A convenient functional solution which is simple to clean and move to different locations.



SPECIFICATIONS	ZM-9200	ZM-9202
Operating Voltage	7V	12V
Power Consumption	0.9W	2.4W
Flow Rate	140 litres/hour	200 litres/hour
Outlet Size	8mm	8mm
Cable Length	2m	2m
DIMENSIONS		
Solar Panel	188(L) x 155(W) x 25(H)mm	308(L) x 166(W) x 25(H)mm
Pump Assembly	42(L) x 39(W) x 28(H)mm	42(L) x 39(W) x 28(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
0.9W	ZM-9200	\$54.95	\$49.45	\$43.95
2.4W	ZM-9202	\$99.95	\$89.95	\$79.95

## ✓ RECREATIONAL SOLAR PACKAGE DEALS (CONTINUED)

A range of affordable DIY solar package deals from small entry level for light weight camping to a serious system to provide sufficient power for your off-road or boating get-away. Most of the packages come with everything needed to set up the complete power system with minimum wiring. See individual components for full details and warranty information in the Power section.

### 80 WATT FIXED SOLAR STANDARD PACKAGE

#### Includes:

- 1 x 80W monocrystalline solar panel CAT ZM-9057
- 1 x 12V 8A charge controller CAT MP-3720
- 2 x female PV connector CAT PS-5100
- 2 x male PV connector CAT PP-5102

Note: See individual products for warranty details.



VOLTAGE	WATTAGE	TYPE	CAT.	Qty 1+
12V	80W	Fixed	ZM-9300	\$199.00

### 150 WATT FIXED SOLAR PANEL PACKAGE

#### Includes:

- 1 x 150W monocrystalline solar panel CAT ZM-9059
- 1 x 12V 20A PWM charge controller CAT MP-3126
- 2 x female PV connector CAT PS-5100
- 2 x male PV connector CAT PP-5102

**MORE INFORMATION...** Individual solar products and hardware are featured elsewhere in our power section

Note: See individual products for warranty details.



VOLTAGE	WATTAGE	TYPE	CAT.	Qty 1+
12V	150W	Fixed	ZM-9301	\$329.00

## ✓ SOLAR PANEL MOUNTING HARDWARE

### UV STABILISED SOLAR SYSTEM POWER CABLE - IP RATED

Very tough cable, specifically for the rigours of outdoor use in solar panel installations. Dust, age and UV resistant, tinned copper conductors to minimise corrosion. Use with our PV connectors for complete environmental protection.

#### 100 METRE ROLL

SPECIFICATIONS	WH-3121	WH-3122
Current(A)	58A	76A
Dia(mm)	4mm sq.	6mm sq.
Conductor Material	Tin plate copper, Class 5	
Insulation Material	XLPO	
Rated Voltage	1000VDC	
Temperature Range	-40 to +125°C	
TUV Certification	2 PFG 1161/01.06	

	CAT.	Per Metre	1+ Rolls	5+ Rolls
4.0mm <sup>2</sup>	WH-3121	\$4.95	\$435.00	\$369.00
6.0mm <sup>2</sup>	WH-3122	\$7.95	\$699.00	\$595.00

### WATERPROOF SOLAR POWER "PV" CONNECTORS

IP67 rated for maximum environmental protection, these photovoltaic (PV) system connectors are ideally suited to harsh installations such as solar panel arrays and other permanent outdoor applications. When matched with our solar power cables WH-3120 & WH-3122, you can leave your cabling out in the open with the knowledge that you will never have a bad connection or an oxidised power cable. The panel mounting & in-line connectors suit a wide range of system applications:

Assembly Tool: TH-1930

Suitable crimping tools: TH-1834/TH-2000

- Pin dimension 4mm
- Tin plated copper contacts
- Contact resistance <5mΩ
- -40°C to +90°C
- IP67 rated
- Housing material PPO



SPECIFICATIONS	ALL MODELS
Rated Voltage	1000VDC
Rated Current	30A at 70°C. 25A at 85°C
Contact Resistance	<5 milliohms
Temperature Range	-40 - 90°C
TUV Certification	2 PFG 1161/01.06

SIZE	CAT.	Qty 1+	Qty 10+	Qty 50+
Female Inline	PS-5100	\$7.50	\$6.75	\$5.95
Male Inline	PP-5102	\$7.50	\$6.75	\$5.95

### SOLAR PANEL 'Y' LEADS

Used for connecting the output of two solar panels in parallel or connecting multiple panels in an array. Waterproof and UV resistant.

- Pin dimension 4mm
- Contact resistance <5m ohm
- -40°C to +90°C
- TUV certified.
- Tin plated copper contacts
- IP67 rated
- Housing material PPO
- Both are 300mm long.

#### 2 SOCKETS TO 1 PLUG

Generally used on the positive pole of the panel.



#### 2 PLUGS TO 1 SOCKET

Generally used on the negative pole of the panel.



	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Sockets to 1 Plug	PS-5110	\$19.95	\$17.95	\$15.95
2 Plugs to 1 Socket	PS-5112	\$19.95	\$17.95	\$15.95

### STAINLESS STEEL POWER DISTRIBUTION POSTS



Heavy duty stainless steel posts mounted on a moulded plastic base.

- 48VDC max.
- Mounting hole diameter: 4.5mm
- Mounting hole spacing: 36mm between centres
- Dimensions: 45(W) x 43(L) x 35(H)mm

**DO NOT USE FOR 240V**

	CAT.	Qty 1+	Qty 4+	Qty 10+
Single M10	SZ-2090	\$9.95	\$8.75	\$7.75
Twin M8	SZ-2092	\$11.95	\$10.75	\$9.55
Twin M6	SZ-2094	\$11.95	\$10.75	\$9.55

## CIRCUIT PROTECTION FOR PV APPLICATIONS

### 4 WAY LOCKABLE IP66 CIRCUIT BREAKER ENCLOSURE

Designed to take the range of DIN rail circuit breakers. Standard 4-pole ABS enclosure, spring loaded clear front cover with padlock tabs, top, bottom and rear cable entry, DIN rail included, sealed to IP66. Suitable for electrical installations or solar applications.

- Dimensions: 96(W) x 195(H) x 98(D)mm



	CAT.	Qty 1+
Fuse Holder	SF-4158	\$26.95

### SOLAR SUCCESS - COMPLETE GUIDE TO HOME AND PROPERTY SYSTEMS

A complete guide for home and remote property systems, this book is about using solar energy to reduce the fossil fuel generated electricity that produces our carbon footprint. This can be done by three associated and economically viable approaches: reduce energy usage by doing things differently, reduce energy usage by using more energy-efficient appliances, and, change the supply of energy to non-fossil fuel through appropriate technology. A pragmatic no-nonsense approach to solar energy written by acclaimed Australian author Collyn Rivers, who walks the walk by showing his self-installed solar system on his 100% solar powered 10-acre property in the Kimberley. Spiral bound softcover.

- 100 pages, 297 x 210mm



	CAT.	Qty 1+
	BE-1537	\$54.95

### ULTRA HIGH CURRENT FUSES

Littelfuse® patented technology designed for high current protection, found OEM on Ford, GM and Chrysler vehicles. Slo-Blo® feature eliminates nuisance blowing during temporary, short duration overloads. Commonly used for battery and alternator connections and other heavy gauge cables requiring ultra high current protection.

- SF-1982 and SF-1984 are slow blow fuses
- SF-1986 is a short-circuit protection device
- Rated up to 32V AC or DC.
- Terminal studs 8mm.

**HIGH CURRENT FUSE HOLDER** SF-1980

**BOLT-DOWN FUSE 125A** SF-1982

**BOLT-DOWN FUSE 250A** SF-1984



	CAT.	Qty 1+	Qty 3+	Qty 6+
Fuse Holder	SF-1980	\$24.95	\$22.35	\$19.70
Bolt Down Fuse - 125A	SF-1982	\$9.95	\$8.75	\$7.75
Bolt Down Fuse - 250A	SF-1984	\$9.95	\$8.75	\$7.75

### SOLAR THAT REALLY WORKS!

The sun god Ra has been raining down free energy for about 4.5 billion years and it is only in recent years that humans have developed the technology to capture it. This is an informative book that fills a previously all but unexplored need in one concisely written book. It covers everything you need to know to design a solar electrical system, for everything from a caravan to a permanent remote dwelling. It also contains specialised information for applications such as converted coaches. Solar that Really Works shows what can and can not be run from typical solar installations as well as how to calculate energy requirements. You won't be left asking questions, as the author has everything covered!

- Completely revised 3rd edition
- Softcover, 96 pages, 297 x 210mm (A4)



	CAT.	Qty 1+
	BE-1535	\$49.95

### SOLAR POWER METER

Installing solar panels can result in a missed opportunity if they're not positioned optimally to catch the radiation from the sun. Similarly to a TV installer using a signal meter, you can use this device to find optimum locations on a rooftop (or wherever you're installing them) to help ensure they'll be efficient and generate as much of their rated power possible for your location. Expressed as either W/m2 (Watts per square metre), or BTU/ft2 (British thermal units per square foot). Measurement up to 1999W/m2, or 634BTU/ft2. With data hold and high accuracy, you can get rapid readings on the huge LCD. Includes carry case.

- Optimise solar panel installation
- High accuracy
- Fast readings



SPECIFICATIONS	QM-1582
Range	0- 1999W/m2, 634BTU/ft2
Resolution	1W/m2; 1 BTU/ft2
Sampling Time	0.25 Seconds Approx.
Power	3 x AAA Batteries (Included)
Weight	260g
Dimensions	63(W) x 162(H) x 26(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-1582	\$129.00	\$116.00	\$103.00

## SOLAR PANEL MOUNTING HARDWARE

### ECOTECH PROFESSIONAL SOLAR MOUNTING HARDWARE

A universal and code compliant mounting system for attaching solar panels to the roof of your property. Designed to be used with either tiled or tin roofs, with any slope from 0-60° (either flat or pitched), and fully cyclone rated even for wind region D. The easy insertion modules mean that you don't have to slide each attachment along the rail to get it in place, they slot in quite easily at the very spot you want to attach them. For use with 35mm thick modules, a full range of components are available.

- Cyclone proof to Wind Region D (installation guide must be strictly adhered to)
- Vertical or horizontal panel mounting
- Suits any solar panel width, but optimised for 800-825mm width
- Suitable for aluminium framed panels
- 10 year materials warranty
- AS/NZS 1170 approved
- Roof slope: up to 60°
- Wind load: 80m/s
- Snow load: 1.4kNm2

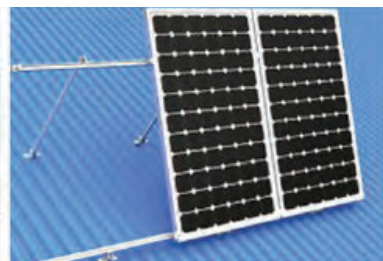


WARRANTY

Note: not available at all stores but can be ordered



Corrugated Iron Roof



Corrugated Iron Roof

### RAILS & SPLICES

	CAT.	Qty 1+	Qty 4+	Qty 10+
2560mm Solar Panel Rail 3PV	HS-8800	\$49.95	\$44.90	\$39.90
3405mm Solar Ecotech Rail	HS-8801	\$69.95	\$62.95	\$55.95
4200mm Solar Ecotech Rail	HS-8802	\$84.95	\$76.50	\$67.95
Solar Panel Mounting Rail Splice	HS-8803	\$9.95	\$8.75	\$7.75



## SOLAR PANEL MOUNTING HARDWARE (CONTINUED)

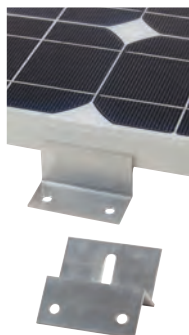
### CLAMPS, HOOKS & LEGS

	CAT.	Qty 1+	Qty 4+	Qty 10+
Solar Panel Rail End Clamp 35mm	HS-8804	\$3.95	\$3.45	\$3.15
Solar Panel Rail Mid Clamp 35mm	HS-8805	\$3.95	\$3.45	\$3.15
Solar Panel Tile Roof Hook	HS-8806	\$26.95	\$23.95	\$21.35
Solar Panel Tin Roof Hook	HS-8807	\$8.95	\$7.95	\$6.95
Solar Panel Adjacent Front Leg Tilt	HS-8810	\$15.95	\$14.35	\$12.70
Solar Panel Mounting Back Leg 10-15'	HS-8811	\$39.95	\$35.90	\$31.90
Solar Panel Mounting Back Leg 15-30'	HS-8812	\$49.95	\$44.90	\$39.90
Solar Panel Mounting Back Leg 30-60'	HS-8813	\$59.95	\$53.95	\$47.90

### UNIVERSAL INDIVIDUAL SOLAR PANEL MOUNTING BRACKET

Designed for mounting solar panels individually to a fixed surface, such as the roof of a caravan, motor home, shed, or any number of other applications. Not only do these brackets provide secure & easy mounting, but they also space the panel up to provide necessary airflow. Each bracket includes a stainless steel M6 bolt and nut to attach it to the factory holes in the aluminium frame of your solar panel, meaning that no drilling or modification is required. Sold individually, so you just have to purchase the quantity that suits your panel & application.

- Made from 6061 aluminium alloy
- Recommended quantity for panels up to 40W: 4
- Recommended quantity for panels 40W-200W: 6
- Spacing from mounting surface: 22mm
- Dimensions: 80(L) x 68(W) x 35(H)mm



Note: Solar panel not included

CAT.	Qty 1+	Qty 4+	Qty 10+
HS-8780	\$7.95	\$6.95	\$6.25

### ABS SOLAR PANEL MOUNTS FOR CARAVAN/MARINE

Attaching solar panels to the roof of your caravan or the deck of your boat may sound like a relatively straight forward procedure - if you are happy to drill holes. If you've just sunk tens of thousands of dollars into your caravan or boat, that's probably the last thing you want to do, which is why we have introduced this range of ABS solar panel mounts. Quite simply, you stick these heavy duty ABS plastic mounts onto your caravan or boat using Sikaflex®, and then screw your panel onto the mount. The solar panel is kept with adequate space underneath for cooling, and the curved design ensures adequate wind deflection for high winds. There are 4 different products, which can be used in any combination to suit your specific application. White in colour.

### ABS SOLAR PANEL CORNER MOUNTS

A set of four corner mounts, to attach each corner of your solar panel to your desired mounting surface. These can be used on their own for solar panels 40W or smaller.

- Dimensions: 150(L) x 150(W) x 65(H)mm
- Set of 4, CAT. HS-8860



### ABS SOLAR PANEL SIDE MOUNTS 180MM

This pair of side mounts are intended to be attached to the long edge of taller solar panels, such as 80W and above, adding extra mounting strength and giving more wind deflection.

- Dimensions: 180(L) x 120(W) x 65(H)mm
- PAIR, CAT. HS-8862



### ABS SOLAR PANEL SPOILER MOUNTS 510MM



Specifically designed to deflect wind on solar panel edges that face into high winds, such as the leading edge of solar panels mounted on caravan or RV rooftops. Well matched to 80W and 90W panels oriented with the short edge leading into the wind.

- Dimensions: 510(L) x 120(W) x 65(H)mm PAIR, CAT. HS-8864

	CAT.	Qty 1+	Qty 4+	Qty 10+
Corner Mounts Set of 4	HS-8860	\$39.95	\$35.90	\$31.90
Side Mounts 180m - Pair	HS-8862	\$24.95	\$22.45	\$19.95
Spoiler Mounts 510mm - Pair	HS-8864	\$49.95	\$44.95	\$39.95

### ABS SOLAR CABLE ENTRY POINT

Usually, at some point the solar power cables need to enter into the caravan or boat and down to the battery area. To avoid making unsightly and potentially leaky cable entries, you can use this neat product and drill out your cable entry point, and then cover it over giving you two fully waterproof cable gland cable entries that look neat and purpose built.

- IP67 cable glands included
- Dimensions: 100(L) x 90(W) x 45(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
Cable Entry Point	HS-8866	\$14.95	\$13.45	\$11.95



### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!

## SOLAR REGULATORS / CHARGE CONTROLLERS

### 12V 6A BATTERY CHARGING REGULATOR FOR SOLAR PANELS

Designed for efficiently charging 12V batteries using solar cells rated up to 6 amps. It is easy to wire up, prevents battery discharge during low sunlight and indicates charging and full battery conditions using a yellow and green 3mm LED.

- Ideal for charging 12V SLA batteries from solar panels up to 60 watts
- 6 amp fuse and fuse holder recommended - not supplied



SPECIFICATIONS	AA-0348
Input	14 to 30V (open circuit voltage), nominal 12V
Max. Input Current	6A
Inrush Voltage	Battery voltage < approx. 13.4V
Interrupting Voltage	Battery voltage > approx. 14.4V
Own Power Consumption	<2.5mA (LED's on)
Dimensions	72(W) x 50(D) x 42(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
12V 6A	AA-0348	\$29.95	\$26.95	\$23.95

### 12V 20A SUPER SOLAR PANEL REGULATOR

With a massive 20 amp current handling, this switching solar panel regulator is lightweight, easy to install and does not require a heatsink. It installs easily and features automatic operation, LED power indication and boasts an efficiency up to 99.2% @ 20 amps. Not only does the regulator switch the solar panel in and out depending on the battery voltage, the regulator will disconnect the solar panel after approx 20 minutes at night fall to prevent any losses into the panel overnight. Completely Automatic.

- Battery or solar power LED indication
- Suitable for 1 to 20 amps
- Handles open circuit panel voltages 32 Volts
- Reverse Polarity Protected



SPECIFICATIONS	MP-3126
Terminals	6.4mm spade plug
Efficiency	97.0% @ 5 amps, 98.5% @ 10 amps, 99.2% @ 20 amps
Weight	75g
Dimensions	66(L) x 51(W) x 34(H)mm
Dimensions	97(L) x 46(W) x 26(H)mm

	CAT.	Qty 1+
12V 20A	MP-3126	\$49.95

See our Solar Panel Meter on page 408

### Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck.

\*Conditions apply - see page 526 For details

## Tech Talk: Solar Charge Controllers

Directly connecting a solar panel or array to a battery can be catastrophic as solar panels can output a wide voltage range. As an example, a nominal 12 volt rated panel can output anything up to 22 volts during an average sunny day. A solar charge controller between the panel and the battery ensures the battery receives the correct output voltage and current from the panel to minimise the risk of the battery being overcharged or discharging back into the panels. Charge controllers come in a variety of types which give different performance and can be matched to simple recreational applications all the way up to complex high power solar array installations.

**SWITCHING:** Simple switching controllers connect the panel to the battery when the panel is providing power & the battery is not fully charged. This type of controller is low cost and only good for basic solar equipment setups such as standby lighting, etc where the panel yield is far higher than the load requires.

**PWM:** Pulse width modulated (PWM) controllers continually apply voltage pulses to the battery whenever the panel is providing sufficient voltage. The pulse width (or duration) is varied by the controller depending on the charge

state of the battery to ensure the correct amount of charge is harvested from the panel whenever it is available. As a result, PWM controllers provide a much higher power yield than simple switching controllers.

**MPPT:** Maximum power point tracking (MPPT) controllers maximize power conversion between the panel output and the battery input by using a DC to DC switchmode power converter. By continuously tracking the panel output and adjusting the converter they yield the maximum amount of power under widely varying solar conditions. MPPT controllers give the best solar system efficiency and improve solar system power yield by a significant percentage. Both PWM and MPPT controllers are available with display panels which allow you to track performance of the solar system. Panel voltage, battery voltage, charging current, and total charge supplied can be easily displayed so you can ensure the system is running correctly. More complex models also include integration functions to remotely control other equipment or be linked into advanced systems.

### ✓ SOLAR REGULATORS / CHARGE CONTROLLERS (CONTINUED)

#### 12/24V PWM SOLAR CHARGE CONTROLLERS WITH LED INDICATOR AND USB

Intelligent yet lightweight, this solar controller uses Pulse Width Modulation (PWM) to control battery charging. With total autonomy, its set-and-forget operation means you can get maximum charge into your batteries from your solar installation without having to worry about those things. It provides all the important safety features such as overload, short-circuit, over-discharge, and reverse-polarity protection. A handy feature is also the USB port located on the front panel, to provide up to 1.2A charging. Very handy during power outages to keep your phone charged without any additional equipment. Charge modes include bulk, equalise, and float charging, and the unit automatically switches to the best charging mode. Suitable for sealed lead acid, as well as Gel/flooded type cells.

- Automatic charge mode selection
- Suitable for 12V and 24V battery banks
- USB charging port on front panel



SPECIFICATIONS	MP-3750	MP-3752
Charging Modes	Bulk, Equalise, Float	
Supports	Sealed, Gel and Flooded	
Voltage	12/24VDC	
Charging Current	10A Max.	20A Max.
USB Output	5V @ 1.2A	
Weight	100g	180g
Dimensions	130(H) x 85(W) x 30(D)mm	

	CAT.	Qty 1+	Qty 2+	Qty 4+
12/24V 10A	MP-3750	\$39.95	\$35.95	\$31.95
12/24V 20A	MP-3752	\$69.95	\$62.95	\$55.95

#### 12/24V 10A DUAL BATTERY PWM SOLAR CHARGE CONTROLLER WITH LED INDICATOR

We have many solar battery charger controllers - up to 50A - but they only work on one battery bank. This unit will charge TWO house battery banks or one house bank and your motor start battery as well. Too often the motor start battery is forgotten if you are camped in the one spot for a long time.

- Will charge 2 completely separate battery banks at the same time
- Works with 12V or 24V systems
- Highly efficient PWM (Pulse-width modulation) charging system
- Provides up to 10A charging current (Limited by size of your solar panels)
- Electronic protection from over charging short circuit or accidental reverse battery connection

##### Specifications:

- Max solar input voltage: 30V (12V system), 55V (24V system)
- Battery input voltage range: 8-15V (12V system), 8-30V (24V system)
- Max output current (both channels): 10A
- Overnight self-consumption: 4mA
- Dimensions: 153 (W) x 76 (H) x 37 (D) mm
- Weight: 240g

Recommended solar panel to utilise output of this controller. ZM-9059, 8.3A unit.

(Note output of this controller is limited by the current output of the solar panel feeding it)

	CAT.	Qty 1+	Qty 2+	Qty 4+
12/24V 10A	MP-3760	\$69.95	\$62.95	\$55.95

#### 12/24V PWM SOLAR CHARGE CONTROLLERS IP67

A highly efficient fully automatic 12/24V PWM solar charge controller that adopts the most advanced digital technology which increases battery lifetime and improves solar system performance. With a robust industrial housing and IP67 protection this charge controller is suited to most applications especially extreme outdoor environments where corrosion, dust and water ingress are prevalent. Capable of automatically detecting day/night it comes with an inbuilt timer which can be set to operate loads at specific intervals or manually in the night.

- High efficient PWM charging
- Automatically recognizes day/night
- LED indicators for PV and battery status
- Industrial design, wide application range
- Intelligent timer function with 1 to 13 hours' option
- PV reverse polarity protection
- Battery overcharge, over discharge, reverse polarity and overheating protection
- Load overload and short circuit protection



SPECIFICATIONS	MP-3756	MP-3758
Max. PV Input Voltage	50V	
Current	10A	20A
Equalize Voltage	14.8V(12V) / 29.6V(24V)	
Boost Voltage	14.4V(12V) / 28.8V(24V)	
Flood Voltage	13.7V(12V) / 27.4V(24V)	
Low Voltage Reconnect Voltage	12.6V(12V) / 25.2V(24V)	
Low Voltage Disconnect Voltage	11.2V(12V) / 22.4V(24V)	
Self-Consumption	12V: <4.58mA 24V: <6.01mA	
Temperature Compensation Coefficient	-5mV/°C(2V (25°C))	
Working Temperature	-35°C - 55°C	
IP Rating	IP67	
Mounting Dimension	101mm	
Mounting Hole Size	ø5	
Power Cable	PV/BAT/LOAD: 4.0mm <sup>2</sup>	PV/BAT/LOAD: 6.0mm <sup>2</sup>
Weight	410g	435g
Dimensions	109(W) x 75(H) x 26(D)mm	

	CAT.	Qty 1+	Qty 2+	Qty 4+
12/24V 10A	MP-3756	\$59.95	\$53.95	\$47.95
12/24V 20A	MP-3758	\$89.95	\$80.95	\$71.95



## ✓ SOLAR REGULATORS / CHARGE CONTROLLERS (CONTINUED)

### 12/24V 30A PWM SOLAR CHARGE CONTROLLER WITH LCD DISPLAY AND TIMER FUNCTION

A highly efficient and reliable solar charge controller which uses regulated charge rates to safely and correctly charge your battery. It automatically detects 12 or 24 volt inputs and can be left on permanently in maintenance mode to ensure battery stays at an appropriate level. Dual timer feature allows for loads (12/24 Volt appliances) to be controlled at certain times during the night when needed. An intuitive LCD screen displays various smarts allowing users to access voltage capacity, charging current, Timer and many more features.

- High efficiency
- LCD Backlit display

SPECIFICATIONS	MP-3754
Maximum Input DC Current	30A
Maximum Open Circuit Voltage	29VDC @ 12VDC, 45VDC @ 24VDC
Maximum Load DC Current	30A
End of Charge Voltage	14.4/28.8VDC±2%
Deep Discharge Protection Voltage	11/22VDC±2%
Battery Rated Voltage	12/24VDC
Typical Idle Consumption	20mA
Operating Temperature	-20°C/+50°C



	MAX. LOAD CURRENT	CAT.	Qty 1+	Qty 2+	Qty 4+
12/24V with Timer Function	30A	MP-3754	\$99.95	\$89.95	\$79.95

### 12V/24V MPPT\* SOLAR CHARGE CONTROLLERS

MPPT technology uses DC to DC conversion along with some electronic smarts to be able to extract the absolute maximum charging power from your solar panels, giving you up to an extra 10-40% from your solar panels when compared to a normal PWM charge controller. Adding to the benefits of MPPT technology are the features of this charge controller, such as 3-stage battery charging, twin timer programming, 30A load control with automatic load disconnection/reconnection, and much more. Programming is simple and intuitive via the front panel buttons whilst the LCD screen shows you what's happening. Suitable for 12V or 24V systems.

- Automatic load control with low-voltage disconnect/reconnect
- Two timers available for programming
- Includes temperature sensor for battery charging compensation
- Protection against over voltage, reverse connection, short circuit, over current, and over temperature

NOTE: Unit WILL charge a 12V battery from 24V solar panels, but not vice versa.

SPECIFICATIONS	MP-3739 12V BATTERY	MP-3739 24V BATTERY	MP-3735 12V BATTERY	MP-3735 24V BATTERY
PV Nominal Voltage	12V	24V	12V	24V
Max PV Array	180W	360W	360W	720W
Max PV Open Circuit Voltage	50V	50V	65V	65V
Bulk Charge (Adjustable)	13.8-14.8V	27.6-29.6V	13.80-14.8V	27.6-29.6V
Float Voltage (Adjustable)	13.0-14.2V	26.0-28.4V	13.0-14.0V	26.0-28.0V
Max Charge Current	15A	15A	30A	30A
Max Load Current	15A	15A	30A	30A
Ambient Temp Range	-20°C - 50°C	-20°C - 50°C	-20°C - 50°C	-20°C - 50°C
Efficiency	98%	98%	97%	97%
Dimensions	205(L) x 145(W) x 55(H)mm		205(L) x 145(W) x 55(H)mm	

	MAX. LOAD CURRENT	CAT.	Qty 1+	Qty 2+	Qty 4+
12V/24V	15A NEW	MP-3739	\$149.00	\$133.95	\$118.95
12V/24V	30A	MP-3735	\$249.00	\$219.00	\$199.00

### 12-48VDC 50 AMP MPPT SOLAR CHARGE CONTROLLER

A highly intelligent charge controller for use with solar installations. Use with 12, 24, 36, or 48V battery banks. Maximum Power Point Tracking (MPPT) for maximum efficiency and charge rate. For use with solar arrays up to 95VDC. It features adjustable bulk and float charge voltages to fine-tune for your installation, and heavy duty terminals for heavy gauge cabling. The LCD provides feedback on charge status, current and voltages. Built into a durable heatsink case for permanent installation.

SPECIFICATIONS	MP-3731
Compatible Battery Bank Voltages	12 / 24 / 36 / 48VDC Selectable
Maximum Input Power	650W (12VDC System) / 1300W (24/36/48VDC System)
Input Voltage	16 - 95VDC
Max Charging Current	50A (12 / 24 VDC), 35A (36VDC), 25A (48VDC)
MPPT Efficiency	> 99%
Max Load Current	50A
DC Load Output Voltage	Battery Voltage
Over Discharge Voltage	11.3 / 22.6 / 34.2 / 45.6
Overnight Standby Current	60mA Max
Dimensions	202(W) x 235(H) x 88(D)mm, 2kg

- High Efficiency MPPT Chargin
- Overcharge Protection
- Reverse Current Protection
- Automatic Charge Managemen
- Under-Voltage Protection



	MAX LOAD CURRENT	CAT.	Qty 1+	Qty 2+	Qty 4+
12/24/36/48VDC	50A	MP-3731	\$349.00	\$309.00	\$279.00



## HIGH CURRENT CONNECTORS

These connectors first appeared on electric forklift trucks. They proved to be so useful, reliable and versatile the original type grew to be a family of connectors of various current carrying capacities. The applications have grown considerably and now you commonly see them in RV, caravan and other off-road vehicle, and of course in marine applications.

### 50A ANDERSON CONNECTORS

This is the most popular standard Anderson unit. It supports the greatest range of variations. It is very commonly used in marine, 4WD and caravanning applications. Supplied as a moulded grey body with identical positive and negative contacts. Inserting the contacts in the body automatically polarises the connector (Cable entry contacts do not change overall connector body size).



SPECIFICATIONS	PT-4425	PT-4427	PT-4420
Contact Rating	50A	50A	50A
Contact Wire Size	#8 AWG	#12-10 AWG	13.3mm <sup>2</sup> (#6 AWG)
Voltage Rating	600V (AC or DC)	600V (AC or DC)	600V (AC or DC)
Max Wire Insulation Dia.	11mm	11mm	11mm
Contact Retention Force	22kg	22kg	22kg
Operating Temperature	-20 to +105°C	-20 to 105°C	-20 to +120°C
Anderson Part No.			SB50-6319
Dimensions	48(L) x 36.5(W) x 15.9(H)mm		

AWG	CURRENT RATING	CAT.	Qty 1+	Qty 10+	Qty 50+
8	50A	PT-4425	\$9.95	\$8.95	\$7.95
12-10	50A	PT-4427	\$9.95	\$8.95	\$7.95
6	50A	PT-4420	\$9.95	\$8.75	\$7.75

They were originally made by a company called Anderson® and indeed this name has become the generic description for the type. Jaycar carries a very large range of Anderson-type connectors for every time high current needs to be reliably coupled together.

### 120A & 175A ANDERSON CONNECTORS

These are the larger body connector styles that you commonly see on electric forklift trucks. You occasionally see them use as winch connectors on 4WDs, especially the PT-4422 model. Identical design to 50A model only larger. The positive and negative contacts are the same and inserting the contacts home inside the connector (once the power cable has been crimped or solder-sweated) is seated home the connector is automatically polarised.



SPECIFICATIONS	PT-4422	PT-4424
Contact Rating	120A	175A
Contact Wire Size	33.6mm <sup>2</sup> (2 AWG)	53.5mm <sup>2</sup> (1/0 AWG)
Voltage Rating	600V (AC or DC)	600V (AC or DC)
Max Wire Insulation Dia.	14.6mm	19mm
Contact Retention Force	45.5kg (100lbs)	137kg (300lbs)
Operating Temperature	-20 to +125°C	-20 to +125°C
Anderson Part No.	B120-6800G1	SB175-6325G1
Dimensions	63.5(L) x 44.5(W) x 20.6(H)mm	79.4(L) x 55.4(W) x 25.4(H)mm

AWG	CURRENT RATING	CAT.	Qty 1+	Qty 10+	Qty 50+
2	120A	PT-4422	\$19.95	\$17.70	\$15.70
1/0	175A	PT-4424	\$29.95	\$26.90	\$23.70

## HIGH CURRENT LEADS

### 50A ANDERSON LEADS

PT-4440

A series of Anderson connector leads for automotive, caravan, 4WD or industrial interconnection. The design of the Anderson connector housing is genderless, whereby each connector simply interconnects with another so you can't plug them in the wrong way - one less thing to worry about! Each lead is pre-made with machine crimped terminations, and tinned copper cable. Connectors are rated at 50Amps, with either 8AWG cable or 16AWG cable fitted depending on the model.

Six versions available:

PLUG EXTENSION, 8AWG 5M

CAT. PT-4440

PIGGYBACK, 8AWG, 300MM

CAT. PT-4442

EYE TERMINAL, 8AWG, 300MM

CAT. PT-4444

ANDERSON TO 15A CIGARETTE PLUG, 16AWG, 300MM

CAT. PT-4446

ANDERSON TO 15A CIGARETTE SOCKET, 16AWG, 300MM

CAT. PT-4448

ANDERSON TO 2 X 15A CIGARETTE SOCKET, 16AWG, 300MM

CAT. PT-4447



### 50A ANDERSON PLUG TO INSULATED BATTERY CLAMPS

Tough insulated battery clamps connected to an Anderson plug. Ideal for connecting a solar panel, portable fridge, compressor, or inverter to a battery.

- 8 AWG cable
- 50A rated
- Insulated battery clamps
- Length: 300mm



CAT.	Qty 1+	Qty 10+	Qty 50+
PT-4449	\$24.95	\$22.45	\$19.95

### SOLAR PANEL PV PLUG & SOCKET TO ANDERSON PLUG - 300MM

Anderson connectors one end (50A), PV connectors on the other end. 4mm<sup>2</sup> conductor 30 amp capacity, twin sheath high quality cable. Ideal for connecting from an Anderson connector solar panel source to a PV load. Comes with grommets on each side for straightforward and neater installations.



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 10+	Qty 50+
PS-5122	\$19.95	\$17.95	\$15.70

### PV CONNECTOR TO EYE TERMINAL LEAD

A handy lead allowing you to attach your battery through the eye terminals to your PV connection on your solar panel. Utilise these red and black 400mm cables, with grommets on each side for straightforward and neater installations.



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 10+	Qty 50+
PS-5124	\$19.95	\$17.95	\$15.70



	CAT.	Qty 1+	Qty 10+	Qty 50+
Plug Extension Lead	PT-4440	\$79.95	\$71.95	\$63.95
Piggyback Lead	PT-4442	\$34.95	\$31.45	\$27.90
Eye Terminal Lead	PT-4444	\$14.95	\$13.45	\$11.95
Cigarette Plug Lead	PT-4446	\$16.95	\$14.95	\$13.35
Cigarette Socket Lead	PT-4448	\$16.95	\$14.95	\$13.35
2 x Cigarette Socket Lead NEW	PT-4447	\$24.95	\$22.45	\$19.95

## Where's My Local Jaycar Store?:

Use our store finder on our website. With over 300 Jaycar Store and Stockists just type in your postcode or area to find the closest one to you.

## ✓ HIGH CURRENT CONNECTORS

### INDIVIDUAL NESTING CONNECTORS

They are genderless which means that there is no separate plug and socket and can be easily stacked to make custom configurations. Supplied as a red and black pair with contacts.



SPECIFICATIONS	PT-4402	PT-4405
Contact Rating	15A	30A
Voltage	600V (AC or DC)	600V (AC or DC)
Contact Wire Size	0.52-1.3mm2 (20-16AWG)	1.3-3.3mm2(16-12AWG) closed barrel
Max Wire Insulation Dia	2.54mm	4.4mm
Contact Retention Force	9kgs (20lbs)	9kgs (20lbs)
Operating Temperature	-20 to + 105°C	-40 to +125°C

SPECIFICATIONS	PT-4406	PT-4407
Contact Rating	45A	75A
Voltage	600V (AC or DC)	600V (AC or DC)
Contact Wire Size	2.1-5.3mm2(14-10AWG) open barrel	13.3mm2(6AWG)
Max Wire Insulation Dia	5.08mm	1.3 - 13.3mm
Contact Retention Force	9kgs (20lbs)	22kgs (50lbs)
Operating Temperature	-40 to +125°C	-40 to +125°C

AWG	CURRENT RATING	CAT.	Qty 1+	Qty 10+	Qty 50+
20-16	15A	PT-4402	\$3.95	\$3.55	\$3.15
16-12	30A	PT-4405	\$4.95	\$4.45	\$3.90
14-10	45A	PT-4406	\$4.95	\$4.45	\$3.90
6	75A	PT-4407	\$11.95	\$10.70	\$9.50

### ANDERSON POWERPOLE SERIES 4 PIN DATA CONNECTOR

A genderless 4 pole signal Anderson connector in a PP15 casing. The design allows you to stack this with the PP15 series 15A Anderson connector (PT-4402) for DC and signal wiring connectivity. It provides a secure quick disconnect for power and signal distribution systems.

- Voltage: 300V
- Current Rating: 7A
- Up to 24 gauge for signal wire connectivity.
- Dimensions: 25(L) x 8(W) x 8(H)mm



		CAT.	Qty 1+
Stackable	7A	PT-4403	\$14.95

## Tech Talk: Assembling Anderson Style Connectors

These connectors come with absolutely no assembly instructions which might surprise some. Assembly is self-evident however.

All that you really have to do is solder-sweat the heavy gauge wire into the 'pot' on the end of the connector tip. It is a good idea to puddle some solder into the pot and then lower the tinned wire into the pot. It may be necessary to apply some more heat (usually with a small gas torch or stove gas top) to get the whole lot to melt. Try to keep the joint immobile until the solder 'sets', then cool off under tap water. And of course you can always crimp the lead into the solder cup, but this should really be done professionally. A piece of heat shrink ties the job nicely. The wire/lug/contact then just snaps into the housing. Look for our Anderson terminal crimping tool on page 228



### HANDLES FOR ANDERSON STYLE CONNECTORS

Facilitates easy connection/ disconnection. Ensures a secure grip, even with gloved hands for easier charging of electric forklifts etc.

Suits Anderson Style Connectors

50A CAT. PM-4436

120A CAT. PM-4438

175A CAT. PM-4439



SUITS	CAT.	Qty 1+	Qty 10+	Qty 50+
PT-4420/25/27	PM-4436	\$5.95	\$5.35	\$4.75
PT-4422	PM-4438	\$7.95	\$7.15	\$6.35
PT-4424	PM-4439	\$19.95	\$17.95	\$15.95

### 4 WAY 15A ANDERSON CONNECTORS

These are the high impact and corrosion-resistant black thermoplastic outer shells with a 4 way 15A Anderson® multi-connectors. They allow easy connection and disconnection for the electrical equipment in commercial and industrial applications. The cable clamps provides strain relief and integral latches to prevent any accidental disconnections of your equipment. The positive latching provides security in applications where shock or vibration may be severe and the integral strain relief to reduce the risk of wire breakage.



#### 4 WAY 15A

- Dimensions: 53(L) x 32(W) x 22(H)mm
- CAT. PT-4434

#### 4 WAY 15A WITH LATCH

- Dimensions: 53(L) x 32(W) x 22(H)mm
- CAT. PT-4436

		CAT.	Qty 1+	Qty 10+	Qty 50+
4 Way	15A	PT-4434	\$12.95	\$11.35	\$10.35
4 Way with Latch	15A	PT-4436	\$12.95	\$11.35	\$10.35

### ANDERSON 35A SBS MINI CONNECTORS

These compact mini connectors can handle up to 600 volts continuous in AC or DC with current up to 35A. The mechanical and colour coded keys protect against accidental cross mating of connectors. The genderless housing makes for easy assembly in the factory or the field. The touchsafe housing prevents accidental exposure to live circuits and these also have the ability to disconnect under load. Supplied as a moulded 2 pole with contacts.



SPECIFICATIONS	PT-4480	PT-4482	PT-4484
Housing Colour	Black	Red	Grey
Contact Rating		35A	
Contact Wire Size		10 AWG	
Voltage Rating		600 (AC or DC)	
Max Wire Insulation		4.0mm2	
Operating Temperature		20°C to 105°C	
Anderson Part No	B02265G2	B02265G1	B02265G4

		CAT.	Qty 1+	Qty 10+	Qty 50+
Black	35A	PT-4480	\$7.95	\$7.15	\$6.25
Red	35A	PT-4482	\$7.95	\$7.15	\$6.25
Grey	35A	PT-4484	\$7.95	\$7.15	\$6.25

## Tech Talk: Safe Wiring Principles

Most of the products shown on these pages are designed for powering accessories in cars and trucks. They are perfect for example in wiring big power amps in your car. If you intend to use these components for critical applications (say, where safety is an issue) we suggest that you wire multiple circuits if possible and limit the current in each circuit accordingly. Then if you lose one circuit you will have some redundancy. You don't, for example want to lose your headlamp circuit at night because of Deep Purple! This principle, of course, applies to all high current wiring.

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.



## EXTENDED VERSATILITY ANDERSON ADAPTORS & ACCESSORIES

This range enables you to chassis or panel mount Anderson plugs. Something you have not been able to do in the past. There are also waterproofing boots, etc.

### CHASSIS MOUNT ANDERSON ADAPTORS

Black cover assemblies with locking device and UV insulated protection to suit Anderson and Anderson style connectors. Used for protection of power connectors in mobile environments. The intelligent design ensures a safe and reliable connection for towing, battery charging, marine & industrial OEM applications.

- Heavy duty materials for protection from the elements
- Compatible with most power connector brands
- Unique locking tab for secure connections
- Power connector snap fits into the cover
- Retractable access cover
- Heavy duty PA nylon construction

Three models available:

50A	PT-4460
120A	PT-4462
175A	PT-4464



	CAT.	Qty 1+	Qty 3+	Qty 6+
Suits 50A	PT-4460	\$19.95	\$17.70	\$15.70
Suits 120A	PT-4462	\$24.95	\$22.35	\$19.70
Suits 175A	PT-4464	\$27.95	\$24.95	\$22.35

### 50 AMP CONNECTOR COVER ASSEMBLY QUICKFIT

Anderson type quick fit connector cover. Suits charging systems for caravans, trailers, solar, marine, industrial.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Suits 50A	PT-4466	\$25.95	\$23.35	\$20.70

### 50A RED CHASSIS MOUNT ANDERSON ADAPTORS

Red 50 amp cover assembly with locking device and UV insulated protection to suit Anderson and Anderson style connectors. Used for protection of power connectors in mobile environments. The intelligent design ensures a safe and reliable connection for towing, battery charging, marine and industrial OEM applications.

- Heavy duty materials for protection from the elements
- Compatible with most power connector brands
- Unique locking tab for secure connections
- Power connector snap fits into the cover
- Retractable access cover



	CAT.	Qty 1+	Qty 3+	Qty 6+
Suits 50A	PT-4470	\$19.95	\$17.70	\$15.70

### PANEL MOUNT ANDERSON CONNECTOR

Flush mount Anderson type quick fit connector cover. Suits charging systems for caravans, trailers, solar, marine, industrial.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Suits 50A	PT-4472	\$24.95	\$22.35	\$19.70

### DUSTPROOF RUBBER BOOT FOR 50A ANDERSON MOUNTS

Rubber sleeve for water, dust and UV protection of Anderson style connectors.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Suits 50A	PT-4474	\$3.95	\$3.50	\$3.15

### 120A CHASSIS MOUNT ANDERSON ADAPTOR RED

Red 120 amp cover assembly with locking device and UV insulated protection to suit Anderson and Anderson style connectors. Used for protection of power connectors in mobile environments. The intelligent design ensures a safe and reliable connection for towing, battery charging, marine and industrial OEM applications.



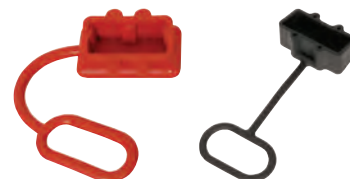
- Heavy duty materials for protection from the elements
- Compatible with most power connector brands
- Unique locking tab for secure connections
- Power connector snap fits into the cover
- Retractable access cover
- Heavy duty PA nylon construction
- Built-in 3mm LED to indicate power status
- Dimensions: 100(L) x 77(W) x 45(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
120A Chassis Mount Red	PT-4463	\$24.95	\$22.45	\$19.95

### HIGH CURRENT DUST/WATER RESISTANT RUBBER COVERS

A water and dust resistant rubber cover to suit our connectors.



SUITS		CAT.	Qty 1+	Qty 10+	Qty 50+
PT-4420/25/27	50A	PM-4434	\$7.95	\$7.15	\$6.35
PT-4422	120A	PM-4432	\$14.95	\$13.45	\$11.95
PT-4424	175A	PM-4430	\$17.95	\$15.95	\$13.95

### WATERPROOF ANDERSON CONNECTORS

These soft shell boots provide water, dirt, chemical and UV protection for the high current Anderson® connectors. The durable boots shield the connectors from water and dirt to IP64 when connected or by itself when the integral cover is used. The terminals of the rubber boot can also be customised to fit cables in-between 12-6 AWG (4-16mm<sup>2</sup>) wires.

- IP64 protection
- Resistant to UV, Roadway Chemical and Ozone
- Splash resistant when connected and by itself when the integral cover is used
- Customise boot terminals to fit your cables from 12-6 AWG which is 4-16mm<sup>2</sup>
- Mountable
- Easy to use

Dimensions when connected: 151(H) x 55(W) x 160(L)mm

#### 50A BOOT LOAD SIDE

- Dimensions: 85(H) x 55(L) x 20(W)mm

CAT. PT-4428

#### 50A BOOT SOURCE SIDE

- Dimensions: 85(H) x 55(L) x 20(W)mm

CAT. PT-4429

#### 120A BOOT LOAD SIDE

- Dimensions: 112(H) x 57(L) x 39(W)mm

CAT. PT-4431

#### 120A BOOT SOURCE SIDE

- Dimensions: 118(H) x 59(L) x 39(W)mm

CAT. PT-4432

#### 175A BOOT LOAD SIDE

- Dimensions: 135(H) x 77(L) x 42(W)mm

CAT. PT-4438

#### 175A BOOT SOURCE SIDE

- Dimensions: 135(H) x 68(L) x 42(W)mm

CAT. PT-4439



	CAT.	Qty 1+	Qty 10+	Qty 50+
Boots to Suit 50A Male	PT-4428	\$15.95	\$14.35	\$12.75
Boots to Suit 50A Female	PT-4429	\$16.95	\$15.25	\$13.55
Boots to Suit 120A Male	PT-4431	\$24.95	\$22.45	\$19.95
Boots to Suit 120A Female	PT-4432	\$24.95	\$22.45	\$19.95
Boots to Suit 175A Male	PT-4438	\$24.95	\$22.50	\$19.95
Boots to Suit 175A Female	PT-4439	\$29.95	\$26.95	\$23.95

## Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.



## ▼ AUTOMOTIVE CONNECTORS

### WATERPROOF DEUTSCH CONNECTOR SETS

High quality Waterproof 2-way "Deutsch" connectors commonly used in automotive or marine applications. Perfect for connecting up sensors/lights in the engine bay due to their superior corrosion protection and waterproof properties.

- Supplied as a male & female connector set with housings, wedges, seals and crimp pins
- Rated to 13A current



	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2150	\$6.95	\$6.25	\$5.50
4 Way	PP-2149	\$8.95	\$8.05	\$7.15
6 Way	PP-2148	\$9.95	\$8.95	\$7.95

### AUTOMOTIVE WATERPROOF PLUG & SOCKET SETS

Waterproof automotive connectors commonly used on many modern cars for wiring connections within the engine bay and other areas that are exposed to moisture. The interlocking parts are surrounded by a rubber seal, while an individual grommet seals each wire. Each package includes plug, socket, cable grommets and crimp pins.

- Current rating: 20A (max.)
- Pin spacing: 7.5mm
- Assembled Length: 70mm



	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2110	\$7.95	\$6.95	\$6.25
3 Way	PP-2112	\$10.95	\$9.75	\$8.75
4 Way	PP-2114	\$16.95	\$14.95	\$13.35
6 Way	PP-2116	\$19.95	\$17.70	\$15.70

### AUTOMOTIVE MULTI-WAY PLUG / SOCKETS - 250 SERIES

Commonly used in automotive applications such as stereo and CB installations, or for replacements in existing wiring. The housings interlock and they come in 2, 3, 4, 6 or 8 way sets. Each comes with plug, socket, and male and female locking spade lugs.



2 way & 6 way shown

	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2062	\$2.95	\$2.60	\$2.30
3 Way	PP-2064	\$3.45	\$3.05	\$2.75
4 Way	PP-2066	\$3.95	\$3.45	\$3.15
6 Way	PP-2068	\$4.95	\$4.45	\$3.90
8 Way	PP-2069	\$6.95	\$6.25	\$5.50

### 2 PIN 32 VOLT PLUGS & SOCKETS

For low voltage applications such as caravans etc up to 15 amps.

- Frankly, they are a bit clunky, but they are reliable and simple to use

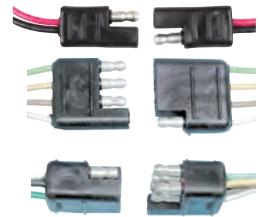


	CAT.	Qty 1+	Qty 10+	Qty 50+
Line Socket	PS-2073	\$19.95	\$17.95	\$15.95
Surface Socket	PS-2074	\$19.95	\$17.95	\$15.95
Line Plug	PP-2075	\$9.95	\$8.95	\$7.95

### WIRED MULTI PIN PLUGS / SOCKETS

Heavy duty plug and socket with bullet type connectors.

- Pre wired with 18AWG wire
- Extremely handy when cables need to be periodically unplugged
- Bullet style connectors

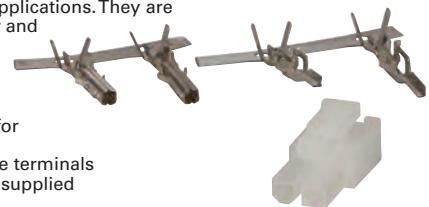


	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Way	PP-2034	\$3.45	\$3.05	\$2.75
4 Way	PP-2030	\$8.95	\$7.95	\$6.95
6 Way	PP-2032	\$11.95	\$10.70	\$9.50

### MINIATURE NYLON MOLEX-TYPE CONNECTORS

Suitable for high current/high density, wire-to-wire or wire-to-board applications. They are suitable for both power and signal connections.

- Fully isolated terminals
- Positive housing locks
- Four point of contact for reliability
- Low engagement force terminals
- Male and female pins supplied
- Wire size: 24-18AWG
- Current rating: 5A
- Voltage rating: 250VAC/350VAC



	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Pin	PP-2021	\$2.75	\$2.45	\$2.15
3 Pin	PP-2023	\$2.95	\$2.60	\$2.30
4 Pin	PP-2027	\$3.45	\$3.05	\$2.75
6 Pin	PP-2025	\$3.95	\$3.45	\$3.15

### MULTI PIN PLUG / SOCKET

Each set consists of nylon body for male/female, along with male/female socket pins to fill all available poles. Will mate with standard MOLEX-type connectors.

- Wire size: 24-14AWG, 0.2 to 2.0mm
- Current rating: 15A AC/DC max
- Voltage rating: 300VAC/DC



### ALSO KNOWN AS SOFT SHELL CONNECTORS

	CAT.	Qty 1+	Qty 10+	Qty 50+
2 Pole	PP-2020	\$2.75	\$2.45	\$2.15
3 Pole	PP-2022	\$2.95	\$2.60	\$2.30
6 Pole	PP-2024	\$3.95	\$3.45	\$3.15
12 Pole	PP-2026	\$6.95	\$6.25	\$5.50

### PIN EXTRACTION TOOL

Take the frustration out of removing Molex connector pins with these time save tools. Simply slide the tool over the connector and push the plunger to effortlessly remove the pin. Both male and female pin extractors available.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Male Extractor	TH-1730	\$24.95	\$22.45	\$19.95
Female Extractor	TH-1732	\$24.95	\$22.45	\$19.95

## Automatic Account:

For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.



## ✓ MERIT AUTOMOTIVE CONNECTORS

### MERIT PLUGS & SOCKETS

Smaller in size than existing cigarette lighter connectors, they also have the advantage of a superior rugged construction and higher current carrying capability. The panel sockets feature a flip down cover to resist ingress of moisture and dust, and can withstand long periods of sustained current draw (unlike the el-cheapo versions of these connectors!). We have even included a modular merit plug to cigarette lighter adaptor in our range for those people who need both styles in a single connector (like those used on popular brands of 4WD fridges and spotlights).

#### MERIT PLUG WITH CIGARETTE LIGHTER ADAPTOR (FUSED MAX 8A)



PP-2094

#### IN-LINE MERIT SOCKET WITH COVER (MAX 15A)



PS-2096

#### UNFUSED MERIT PLUG (15A)



PP-2090

#### MERIT PANEL SOCKET WITH SPRUNG COVER (MAX 15A)



PS-2092



WARRANTY

	CAT.	Qty 1+	Qty 10+	Qty 50+
Unfused Plug	PP-2090	\$6.95	\$6.25	\$5.55
Plug with Cigarette Lighter Adaptor	PP-2094	\$6.95	\$6.25	\$5.50
Panel Socket with Sprung Cover	PS-2092	\$9.95	\$8.75	\$7.75
In-line Socket with Cover	PS-2096	\$6.95	\$6.25	\$5.50

## ✓ MARINE GRADE CIGARETTE PLUGS & SOCKETS

### MARINE GRADE 10A LOCKING CIGARETTE PLUGS & SOCKETS

Marine grade, weather and UV resistant. Ideal for situations where your 12V gear will face mud, dust, salt and other contaminants. A matched locking plug and socket will lock together securely for protection against vibration and shock, or happily work individually with normal cigarette plugs/socket as well.

- PP-1970 plug features a green power LED indicator
- Rated current: 10A
- Fuse protected (PP-1970)
- PS-1972 features protective dust cap and mounting panel
- Locking pins so stay plugged in when plug and socket matched
- Dimensions:

PP-1970: 90(L) x 25(Dia)mm

PS-1972 Panel: 59(L) x 43(W) x 4(D)mm, Socket 40(L) x 36(Dia)mm

PS-1974: 70(L) x 51(H) x 58(W)mm



PP-1970



PS-1972



PS-1974

Need more than 10amps? Why not have a look at Anderson connectors. They start on page 412

	CAT.	Qty 1+	Qty 10+	Qty 50+
Cigarette Plug with LED	PP-1970	\$6.95	\$6.25	\$5.50
Panel Mount Socket + Dust Cover	PS-1972	\$6.95	\$6.25	\$5.50
Surface Mount Socket with Dust Cover	PS-1974	\$12.95	\$11.35	\$10.35

### MARINE GRADE 10A CIGARETTE POWER SOCKETS

High current, marine grade cigarette power sockets capable of up to 10A current, and supplied with multiple mounting options. There is a flat mounting panel, an under dash bracket (for PS-2020 only), and a surface mounting "hood".

- Connections via 6.3mm spade terminals

Four versions available:



PS-2020



PS-2022



PS-2024

#### SINGLE CIGARETTE POWER SOCKET

Includes panel, under dash & surface mount brackets CAT. PS-2020

#### DUAL CIGARETTE POWER SOCKETS

Includes panel & surface mount brackets CAT. PS-2022

#### CIGARETTE POWER SOCKET & LED VOLTMETER

Includes panel & surface mount brackets CAT. PS-2024

#### CIGARETTE POWER SOCKET & 2 PORT USB CHARGER (3.5A)

Includes panel & surface mount brackets

Dimensions - Panel mount:

- Single - 60(W) x 42(H)mm
- Dual - 100(W) x 42(H)mm
- Surface mount hoods:
- Single - 55(W) x 80(L) x 50(H)mm
- Dual - 98(W) x 78(L) x 49(H)mm
- Under dash bracket: 58(W) x 51(H) x 15(D)mm (PS-2020 only)

CAT. PS-2026



PS-2026

CIGARETTE	CAT.	Qty 1+	Qty 10+	Qty 50+
Socket - Single	PS-2020	\$14.95	\$13.45	\$11.95
Socket - Dual	PS-2022	\$19.95	\$17.95	\$15.70
Socket with LED Voltmeter	PS-2024	\$27.95	\$24.95	\$22.35
Socket with 2 USB Ports	PS-2026	\$29.95	\$26.95	\$23.70

### MODULAR PANEL MOUNT BRACKETS

Compatible with many of our cigarette lighter sockets, charging outlets, and more. They use a clever modular design so you can stack multiple units together into one cutout, for a classy and uniform look. There's also a 4-way (2 x 2) mount which suits the same range of accessories. Also 100% interchangeable with the rocker-switch variant of these brackets - SK-0802 / SK-0804 (see page 150).



PS-2806



PS-2808



PS-2810

	CAT.	Qty 1+	Qty 10+	Qty 50+
Modular End	PS-2806	\$3.95	\$3.55	\$3.15
Modular Centre	PS-2808	\$3.95	\$3.55	\$3.15
4 Way (2 x 2) Plate	PS-2810	\$6.95	\$6.25	\$5.55

## ✓ CIGARETTE LIGHTER PLUGS

### CIGARETTE LIGHTER PLUG

Simply plugs into the car cigarette lighter socket to obtain 12VDC from the car battery.

- Economy grade



	CAT.	Qty 1+	Qty 10+	Qty 50+
Economy	PP-2000	\$1.65	\$1.45	\$1.30

### 5 AMP LEAD WITH BARE ENDS

Lead with a 5 amp fused cigarette lighter plug on one end.

- Cable length: 450mm approx
- Cable thickness: 18AWG



	CAT.	Qty 1+	Qty 3+	Qty 6+
5A	PP-1995	\$2.95	\$2.60	\$2.30

### CIGARETTE LIGHTER PLUG - FUSED

As PP-2000 but with the added safety benefit of being fused. Supplied with 3A fuse.

- Recommended



	CAT.	Qty 1+	Qty 10+	Qty 50+
3A	PP-2001	\$3.95	\$3.45	\$3.15

### 8 AMP LEAD WITH BARE ENDS

A lead consisting of an 8 amp fused cigarette lighter plug and 5 metres of thick cable.

- 18 AWG cable



	CAT.	Qty 1+	Qty 3+	Qty 6+
8A	PP-1998	\$13.95	\$12.35	\$10.95

### CIGARETTE LIGHTER SOCKET WIRING

Auto cigarette lighter wiring rarely allows more than 15A to be taken from this circuit.

## ✓ CIGARETTE LIGHTER SOCKETS

### CIGARETTE LIGHTER INLINE SOCKET

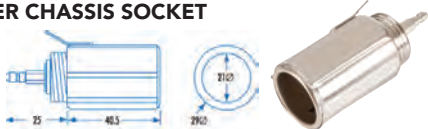
- 5A max



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-2003	\$3.95	\$3.45	\$3.15

### CIGARETTE LIGHTER CHASSIS SOCKET

- Install in dash
- 21mm hole required



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-2002	\$6.95	\$6.25	\$5.50

### DASH/PANEL MOUNT CIGARETTE LIGHTER SOCKET WITH CAP, 15A

Provides a cap protected cigarette lighter socket for your boat, car, or truck. Easy to install includes 2 x countersunk screw holes for easy mounting. Rated at 15A with 6.3mm spade connections

- Dimensions: 56(W) x 31(H) x 50(D)mm



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-2004	\$9.95	\$8.75	\$7.75

### 15A CIGARETTE SOCKET TO 8MM EYE TERMINAL

A handy lead allowing you to power your 12VDC cigarette lighter plug devices from a range of 12VDC sources. The cigarette lighter socket is attached to 16AWG 400mm long red and black lead with 8mm eye terminals on each end.

- Rated to 15A max



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PT-4451	\$12.95	\$11.35	\$10.35

### UNDER DASH CIGARETTE LIGHTER SOCKET WITH PROTECTIVE CAP

This socket can be mounted under a car or boat dash and features a hinged cap with protective gasket.

- Heavy duty auto cable pre-attached
- 450mm length



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-2008	\$12.95	\$11.35	\$10.35

### UNDER DASH DOUBLE CIGARETTE LIGHTER SOCKET

A dual socket mounted on a steel frame which in turn mounts under the dashboard. Heavy duty auto cable is included with in-line fuse holder and terminated with a bullet and Y connector.

- Lead length 300mm
- Self tapping mounting screws included



	CAT.	Qty 1+	Qty 10+	Qty 50+
	PS-2009	\$12.95	\$11.35	\$10.35

### CAR CIGARETTE LIGHTER SOCKET WITH LID

This weatherproof 12V car cigarette lighter socket can be flush mounted and has a springloaded lid to keep it free of dust and debris.

- Perfect for caravan, marine, 4WD or other harsher than normal applications



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PS-2015	\$14.95	\$13.35	\$11.70

### WEATHERPROOF CIGARETTE LIGHTER SOCKET - 15A

Suitable for marine, caravan, 4WD, camping or anywhere you need 12V power. Protected from the elements by a spring-loaded sealed cover and fully sealed electrical connection.

- Panel mounting
- 32mm mounting hole
- Flylead termination



	CAT.	Qty 1+	Qty 4+	Qty 10+
	PS-2011	\$14.95	\$13.35	\$11.70

## ✓ BIKE MOUNT POWER SOCKETS

### MOTORCYCLE CIGARETTE LIGHTER SOCKET MOUNT

A motorcycle 12 volt power outlet is a great addition to your motorcycle when out touring. This is a full kit to install directly to your motorcycle to give you a 12V cigarette lighter socket. It can be used as a power outlet for spotlight, or anything that can be powered by a 12 volt battery.

- Fits the common motorcycle handle bar diameters of: 17-33mm
- 12VDC
- IP65 rated
- 1.5m cable with inline fuse



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	PS-2126	\$19.95	\$17.95	\$15.95

### MOTORCYCLE DUAL USB SOCKET MOUNT

A motorcycle Dual USB Port is a great addition to your motorcycle when out touring. This is a full kit to install directly to your motorcycle to give you a USB port. It can be used as a power outlet for GPS, mobile phone charger or anything that can be powered by a USB Socket.

- Fits the common motorcycle handle bar diameters of: 17-33mm
- 12VDC
- IP65 rated
- 1 x 1A & 1 x 2.1A 5V output (3.1A total)
- 1.5m cable with inline fuse



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	PS-2128	\$29.95	\$26.95	\$23.95



## ✓ CIGARETTE LIGHTER ADAPTORS & SPLITTERS

### 12VDC CAR CIGARETTE LIGHTER SOCKET 4 WAY SPLITTER WITH USB PORT

Comes with a detachable mounting base so you can mount this unit horizontally or vertically on your dash or centre console, and detach it for flexible use.

- 12VDC plug with 1.2m lead / 4 x 12VDC socket outputs
- 1 x 5VDC 1A USB port / 10A max



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1.2m	PS-2019	\$19.95	\$17.95	\$15.95

### 3 WAY CIGARETTE LIGHTER SOCKETS WITH USB POWER AND VOLTMETER

You get three cigarette lighter sockets, two highcurrent 2.4A USB charging sockets, and two standard 1A USB charging sockets. Of course, a 120W maximum total applies (since that's the maximum rating of the one in your dash). The three cigarette lighter sockets aren't voltage regulated, so they'll output the same voltage as your vehicle, however the USB charging ports are regulated to 5VDC regardless of the input.

SPECIFICATIONS	PP-2120
Power Input	12-24VDC
USB Output	5V, 6.8A Max. (2.4A + 2.4A + 1A + 1A)
Lighter Socket Output Power	12-24VDC (Unregulated to input) 120W (Max.)
Safety Fuse	10A
Dimensions	110(W) x 55(D) x 31(H)mm



1  
YEAR  
WARRANTY

LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1m	PP-2120	\$29.95	\$26.95	\$23.95

## ✓ DASH MOUNT USB SOCKETS

### UNDER-DASH OR PANEL MOUNT USB SOCKET

This handy fitting enables you to position a USB outlet under a wooden, fibreglass or metal dashboard complete with rubber plug moisture/dust cover. Alternatively, you can remove the actual USB insert to panel mount the USB socket. The insert requires a 22mm Dia hole but it will go through upto 38mm of panel so your panel can be wood if necessary. This is a very versatile fitting and you have to see it to appreciate what it is capable of.

- Output: 5VDC, 2.1A
- In-line fuse holder included
- Sealing washers/gaskets, mounting screws included
- Smart silver trim bezel included



	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x USB	PS-2016	\$10.95	\$9.75	\$8.75

### USB SOCKETS WITH WEATHERPROOF CAP

A USB power socket with weatherproof cover, suitable for mounting on motorbikes, under-dash on boats or open-top cars. Outputs 5VDC to power or charge Smartphones, Tablets, GPS, etc. Mount to almost any surface using screws, cable ties, double-sided tape, etc (Mounting hardware not included). Supplied with 1.2m fused lead with SAE connectors for easy disconnect.

- Power input: 12/24VDC



	CAT.	Qty 1+	Qty 4+	Qty 10+
1 x USB 2.1A	PS-2017	\$22.95	\$20.65	\$18.35
2 x USB 3.1A with Voltmeter	PS-2013	\$29.95	\$26.95	\$23.95

### USB AND 12V CIGARETTE LIGHTER POWER SOCKET (SWITCHED)

A classy little panel! It features an on/off rocker switch under a protective tamper-resistant cover. 16A rated - it will behave like a circuit breaker if current draw exceeds 16A, and can be immediately switched on again. The panel measures 130mm wide x 50mm high and will need approx. 70mm behind the panel for wiring access. The switch turns the power on to both the 10A cigarette lighter sockets and the USB sockets, of which there are 2, one 1A rated and the other 2.1A, both at 5V of course. There are no inline fuses fitted but you could reconfigure the wiring easily as everything connects by 8x14" QC tabs. Mounting is via two countersunk holes 4mm dia.



NEW  
2018

CAT.	Qty 1+	Qty 3+	Qty 6+
PS-2036	\$34.95	\$30.95	\$27.95

### EASY-INSTALL QUALCOMM® QUICK CHARGE™ 2.0 USB CHARGER

Supplied with panel and surface mount hardware, to easily mount inside your car, caravan, truck etc. You can power it from 12-24V, suitable for cars and dual-battery trucks alike. Includes removable dust cover.

- Input: 12-24VDC
- Dimensions: 50(D) x 35(Dia.)mm



\$

	CAT.	Qty 1+	Qty 3+	Qty 6+
1 x 5VDC @ 2.1A (Max)	PS-2032	\$14.95		
2 x 5VDC @ 2.1A (Max)	PS-2030	\$26.95	\$23.95	\$21.45

### 2 PORT USB CHARGER WITH 3.1A OUTPUT, 12/24VDC

Get rid of your messy cigarette lighter car chargers, and fit something more permanent and better looking. This 2 port USB charger has one port with 1.0A for charging a Smartphone, and the 2nd port can deliver 2.1A for fast charging your Tablet. Input power compatible with 12V and 24V battery systems, with connection via 6.3mm spade terminals. Supplied with panel mount, under dash bracket, and a surface mount "hood".

- 2 port USB Charger: 36(Dia) x 50(D)mm
- Panel mount: 60(W) x 42(H)mm
- Under dash bracket: 58(W) x 51(H) x 15(D)mm
- Surface mount hood: 55(W) x 80(L) x 50(H)mm



1  
YEAR  
WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 10+
2 x USB	MP-3616	\$24.95	\$22.50	\$19.95

### 2 PORT PANEL MOUNT USB CHARGER 3.1A OUTPUT 12/24VDC

This two port USB panel mount charger is designed for charging your electronic devices. It has a black housing with a rubber weather-flap cover to protect the USB sockets. Ideal for quickly charging a GPS, iPhone®, iPod®, PSP, mobile phones etc. Designed in the same housing as our range of laser etched auto rocker switches, enabling you to mount them side by side to give a great look to your switch panel.

- Fused, easy to install
- Input: 12-24VDC / Output: 5VDC
- Dimensions: 43(L) x 40(D) x 24(W)mm



1  
YEAR  
WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 10+
2 x USB	MP-3618	\$24.95	\$22.50	\$19.95

### DUAL USB CHARGING PORTS 4.2A OUTPUT 12/24VDC WITH CAP/INDICATOR LIGHT

Supplied with flush-mount and hood/surface mount options, it provides two 2.1A USB charging outlets (combined total 4.2A). A blue LED let's you know power is available, and a dust-cap helps protect against dust and moisture when not in use.

- Versatile mounting options
- Dual 2.1A USB charging outlets
- Dust cap and power indicator

SPECIFICATIONS	PS-2034
Input	12-24VDC
Output	2 x 5VDC @ 2.1A (max total 4.2A)
Weight	31g
Dimensions	50(D) x 35(Dia.)mm



NEW  
2018

	CAT.	Qty 1+	Qty 3+	Qty 6+
4.2A Dual USB	PS-2034	\$27.95	\$24.95	\$21.95



## CIGARETTE LIGHTER ADAPTORS & EXTENDERS

### FUSED CIGARETTE LIGHTER PLUG TO 2.1MM DC PLUG

Has an internal fuse & LED power indicator.

- Supplied with 3A, 3AG fuse
- Cable length 500mm
- LED power indicator



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
5m	PP-1993	\$2.95	\$2.60	\$2.30

### FUSED CIGARETTE LIGHTER PLUG TO DC PLUG

Has an internal fuse and LED power indicator.

- Supplied with 5A, 3AG fuse
- Cable length 1.5m



LENGTH	DC PLUG	CAT.	Qty 1+	Qty 3+	Qty 6+
1.5m	2.5mm	PP-1997	\$4.95	\$4.45	\$3.90
1.5m	2.1mm	PP-2008	\$4.95	\$4.45	\$3.90

### CAR LIGHTER SOCKET TO CLIPS

This lead simply clips onto car battery terminals and has a cigarette lighter socket on the other end.



LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+
4m	PP-2007	\$9.95	\$8.75	\$7.75

### 10A CIGARETTE LIGHTER EXTENSION CORD - 3M

Cigarette lighter extension cord with dust cover. Extend the range of your cigarette lighter devices.

- Fuse: 10A



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
3m	PP-1992	\$14.95	\$13.45	\$11.95

### 15A HEAVY DUTY CIGARETTE LIGHTER EXTENSION LEAD - 3M

A heavy duty waterproof cigarette lighter extension lead to extend the reach of your 12VDC devices. Features internal fuse protection with LED power indicator. Fits all 12VDC plugs & sockets. Flexible curly cord design.



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
3m	PP-2144	\$12.95	\$11.35	\$10.35

### CIGARETTE LIGHTER DOUBLE ADAPTOR

Incorporates a lighter plug and two inline sockets

- 150mm cable



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1.5m	PP-2006	\$9.95	\$8.75	\$7.75

### CIGARETTE LIGHTER PLUG TO MERIT SOCKET ADAPTOR

This handy adaptor lead allows you to connect your device equipped with a merit plug into a standard cigarette lighter socket.



LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+
3m	PP-2098	\$12.95	\$11.35	\$10.35

### MERIT PLUG TO CIGARETTE LIGHTER SOCKET

Allows you to connect mobile phone chargers and other cigarette lighter plugged devices into vehicles equipped with a Merit socket.



LENGTH	CAT.	Qty 1+	Qty 10+	Qty 50+
3m	PP-2099	\$12.95	\$11.35	\$10.35

### CIGARETTE LIGHTER ADAPTOR CABLE

Contains no circuitry and allows you to power 12V devices from your car cigarette lighter socket.

- Cable length 1.8m long
- Fused
- LED power indicator. Supplied with 8 DC plugs.



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1.8m	PP-1996	\$9.95	\$8.95	\$7.95

### REPLACEMENT POWER LEAD FOR THERMOELECTRIC COOLER/WARMERS

A replacement DC power lead to suit most common thermoelectric cooler/warmers which have the notched rectangular shape DC power input.

- Can fit into cigarette or merit sockets
- 1.8m long



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1.8m	PP-1986	\$17.95	\$16.10	\$14.35

### HEAVY DUTY 10A CIGARETTE POWER EXTENSION LEAD - 5M

This cigarette power extension lead has been specifically designed to carry 10A continuous current with minimal voltage drop. This allows you to move your DC fridge/freezer and other DC equipment some distance away from your battery, whilst minimising low voltage protection issues. Very handy on the campsite or in your caravan. Fitted with a convertible cigarette/merit plug and high current cigarette socket, and made with 12AWG tinned copper cabling.



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
5m	PP-2151	\$49.95	\$44.95	\$39.95

### 12VDC CIGARETTE LIGHTER TWIN SOCKET

Allows you to run two 12V appliances from the one socket.

- Input voltage: 12-24VDC
- Output voltage: 12-24VDC
- Output current: <6A
- LED indicator



CAT.	Qty 1+	Qty 3+	Qty 6+
PP-2005	\$9.95	\$8.75	\$7.75

### 12/24VDC CIGARETTE LIGHTER SOCKET SPLITTER WITH 2X USB PORTS

Power two 12V accessories and 2 x USB devices at the same time. Features a fused cigarette lighter plug on a 650mm lead, and mounting holes for a permanent installation.

- Input: 12/24VDC
- Output: Cigarette Lighter Sockets: 2 x 3A max each / USB Ports: 2 x 5V 2.1A total
- Dimensions: 114(L) x 50(D) x 33(H)mm



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
6.5m	PP-2136	\$15.95	\$14.35	\$12.75

## SAE POWER LEADS

### SAE TYPE PLUG TO CIGARETTE LIGHTER PLUG OR SOCKET

These units consist of the popular polarised SAE plug/skt to a line cigarette lighter socket. The socket has a rubber moisture/dust cover. The lead assembly is 450mm long and the wiring is 10A rated, unfused. Three models available.



CAT.	Qty 1+	Qty 10+	Qty 50+
PP-2012	\$9.95	\$8.75	\$7.75
PP-2014	\$14.95	\$13.45	\$11.95
PP-2016	\$9.95	\$8.75	\$7.75

## Smart Bulbs "Wi-Fi":

Using Wi-Fi, you can control these Smart Bulbs without a hub or additional hardware. Just open the Kasa app on your smartphone to manage the smart bulb remotely, anytime and anywhere.

They can also pair with Google Assistance for voice control, and the free Kasa app lets you control the smart Wi-Fi bulb from any Android (4.1 and higher) or iOS (iOS 8 and higher) device.

- Manage Remotely – Control your lights from anywhere with your tablet or smartphone using the free Kasa app (iOS, Android)

- Fine-Tune Lighting – Dim brightness and fine-tune light appearance from soft white (2700k) to daylight (6500k)
- Voice Control – Pair to Google Assistant to enable voice control
- Circadian Mode – Automatically matches light appearance to time of day
- Monitor Power – Track real-time energy used to stay informed
- Save Energy – Reduce energy use up to 80% without brightness or quality loss compared to a 60W incandescent bulb
- No Hub Required – Connect the bulb to your Wi-Fi at home



### LB100 WITH DIMMABLE 600 LUMEN

The LB100 has 600 lumens brightness with dimmable white light, which can provide you stable customised lighting. Set schedules to turn on/off the Smart Bulbs at any chosen time for your convenience. For example, you can set the bulbs to turn on every morning to wake you up or every dusk to light up your room automatically.



### LB120 WITH TUNEABLE WHITE

With adjustable brightness and tunable white temperature, you can easily set the LB120 to suit your mood. Schedule the LB120 Smart Bulbs around your life and have them to turn on, off, and adjust their light appearance to suit your preference. They can even adjust automatically to changing sunset and sunrise times so it comes on when it gets dark and turns off as the sun comes up.



### LB130 WITH COLOUR CHANGE

Schedule the LB130 Smart Bulbs around your life and have them to turn on, off, and adjust their light appearance to suit your preference. They can even adjust automatically to changing sunset and sunrise times so it comes on when it gets dark and turns off as the sun comes up. Change the colour and intensity as you wish, navigate the tunable white light from warm to cool until you feel comfortable. Smart Wi-Fi bulbs can be controlled separately or as a group, and your favourite settings can be saved as scenes accessible in Kasa app.

- Compatibility – Compatible with Android, iOS, Amazon Alexa and Google Assistant



	CAT.	Qty 1+
LB100 Dimmable	YN-8452	\$49.95
LB120 Tuneable White	YN-8450	\$69.95
LB130 Colour Change	YN-8448	\$99.95

## MAINS LED GLOBES 240VAC

### 10W 240V MAINS LED LIGHT GLOBE

LED light globes that are a true replacement for traditional lighting, offering brilliant lumen performance with wide, evenly spread light. Unlike many other types on the market with only 180° light angle, these lights have a truly even light output across a 270° output angle, making them better than traditional light globes in many cases.

SPECIFICATIONS	SL-2216
Power	10W
Lumens	900
Colour	Natural White
Base	Bayonet
Beam Spread	270°
Colour Temp	4000K
Equivalent Traditional Globe	75W



BUY IN BULK AND SAVE \$

	CAT.	Qty 1+	Qty 2+	Qty 4+
10W	SL-2216	\$14.95	\$12.50	\$10.00

## LED DOWNLIGHT KITS - 240VAC

### 8W DIMMABLE LED DOWNLIGHT KITS - 240VAC

Fully dimmable with traditional electronic light dimmers or our LED dimmer PS-4084, suitable for a ceiling cut out of 75-92mm and supplied with a 2-pin mains lead. Fantastic for DIY replacement of existing halogen downlights, or a totally new installation. Powered directly by 240VAC so there is no need for external LED drivers. Fully approved for electrical safety and even approved for the NSW 'ESS' and Victoria 'VEET' commercial lighting energy saving schemes (electricians take note!). Available in warm white or natural white.



**VIRIBRIGHT**  
The bright side of light

SPECIFICATIONS	SL-2300	SL-2302
Power	8W	8W
Input Voltage	240VAC	240VAC
Lumens	550	700
Equivalent Halogen	50W	50W
Colour	Warm white	Natural white
Colour Temp.	2800K	4000K
Beam Angle	80°	80°
CRI	>85	>85
Ceiling Cutout	75-92mm	75-92mm



LUMENS	COLOUR	CAT.	Qty 1+	Qty 2+	Qty 4+
550	Warm White	SL-2300	\$19.95	\$17.95	\$15.95
700	Natural White	SL-2302	\$19.95	\$17.95	\$15.95



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[www.jaycar.com.au](http://www.jaycar.com.au)



## LED REPLACEMENT LAMPS

### MR11 LED REPLACEMENT LIGHT 15 X 2835 LEDs 120° - 12VAC/DC

High brightness MR11 LED globes used for lighting caravan & marine interiors, some desk lamps, and also used in retail shop display cabinets. High lumen level, available in cool and warm white.

SPECIFICATIONS	BOTH MODELS
Fitting	MR11
Input Power	12VAC/DC, 2.2W
Brightness	230 lumens
Beam Angle	120°
LED Source	15x 2835 SMD LEDs
Dimensions	34(Dia.) x 29(D)mm



**1 YEAR**  
WARRANTY

LUMENS		CAT.	Qty 1+	Qty 3+	Qty 6+
230	Cool white	ZD-0650	\$14.95	\$13.45	\$11.95
230	Warm white	ZD-0652	\$14.95	\$13.45	\$11.95

### G4 LED REPLACEMENT LIGHT, 120° - 12VAC/DC

An easy replacement for a G4 2-pin type halogen globe that uses significantly less power, and lasts much longer. Great for benchtop lighting, reading lamps, and a whole host of other applications.

SPECIFICATIONS	BOTH MODELS
Fitting	G4
Power	2.2W, 12VAC/DC
Light Output	230 lumens
Lens Angle	120°
LED Source	15x 2835 SMD LEDs
Dimensions	27mm Dia.



**1 YEAR**  
WARRANTY

LUMENS		CAT.	Qty 1+	Qty 3+	Qty 6+
230	Cool white	ZD-0655	\$13.95	\$12.35	\$10.95
230	Warm white	ZD-0657	\$13.95	\$12.35	\$10.95

### G4 LED WATERPROOF GLOBES - 12VDC

Low wattage replacement G4 LED lamps suitable for use in recreational vehicles. Completely encapsulated in resin, making them waterproof.

SPECIFICATIONS	ZD-0564	ZD-0566
Colour	Warm white	Cool white
Power	1.5W	1.5W
Light Output	100 lumens	110 lumens
Input Voltage	12VAC/DC	12VAC/DC
Colour Temp.	3000K	6500K
Dimensions	35(L) x 9.5mm	35(L) x 9.5mm



**1 YEAR**  
WARRANTY

LUMENS		CAT.	Qty 1+	Qty 3+	Qty 6+
100	Warm white	ZD-0564	\$14.95	\$13.35	\$11.70
110	Cool white	ZD-0566	\$14.95	\$13.35	\$11.70

## Tech Talk: LED Information

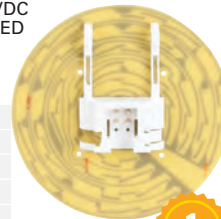
Power supply requirements for LED lamps or lighting modules, such as our MR16 LED downlight replacement globes, can vary considerably and it is essential that a suitable power supply is used. Switchmode transformers, or "electronic transformers" that are designed to run halogen lights, should not be used with LED lighting modules or lamps unless they are specifically certified to do so. LED lamps are compatible with all types of magnetic (linear) transformers, but not all types of switchmode transformers. Most halogen lamp switchmode transformers require a minimum load to function correctly & output a high frequency pulse train based on the load requirements. As LED lamps draw a fraction of the current of an equivalent halogen lamp (typically ~1/10th), this usually results in problems such as flickering, strobing, or in some cases, no light at all. It may also reduce the life expectancy of the LED lamp. It is essential the maximum input voltage of the LED lamp or module is not exceeded and the power supply can deliver the necessary current required in a linear manner. If using switchmode or electronic power supplies, make sure they are designed for use with LED lamps, otherwise use a linear power supply or a DC output power supply.

## LED REPLACEMENT LAMPS FOR CARAVANS

### LED REPLACEMENT LAMP FOR 2D FLUOROS IN CARAVANS

One of the most common lights used in caravans up until quite recently, is the 16W 2D fluoro. The problem with these is not only do they draw a lot of power for the light they produce, but they also blow very frequently, take a long time to "warm up", and they aren't very pleasant on the eye. This LED replacement lamp solves all that! The circular shape metal core PCB is backed with the same moulding as a normal 2D fluoro, so it fits into the same light socket - all you have to do is bypass the fluoro ballast and supply the lamp with 12VDC directly. No need to carry spare globes as the LED lamp is impervious to vibrations, and the LEDs are rated to last over 50,000 hours.

SPECIFICATIONS	ZD-0670
Input Voltage	12VDC
Power	9W
Lumens	900
Beam	180°
LED Type	60x2835 SMD
Dimnsions	150(Dia.)mm



**1 YEAR**  
WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 10+
Cool White	ZD-0670	\$29.95	\$26.95	\$23.70

## LIGHTING ACCESSORIES

### ELECTRONIC TRANSFORMERS FOR LED LIGHTS

These electronic transformers are designed to be used with LED lighting products that take a 12V power source, for example our LED MR16 replacement globes, and provide the same kind of efficient power delivery and compact size as a normal electronic transformer. Electronic transformers that are intended for use with halogen downlights are not suitable for use with LED-replacement lighting products, since using them often causes flickering and dramatically reduces the life expectancy of the LED light. They deliver a constant 12VDC and feature short circuit, over temperature, over load and spike protection. Suitable for domestic and commercial applications, they are perfect for combining with our LED MR16 globes to replace those power-hungry halogen downlights.



**1 YEAR**  
WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
10 Watt	MP-3360	\$24.95	\$22.45	\$19.95
20 Watt	MP-3362	\$29.95	\$26.95	\$23.95

### BASE

Base to suit both 35mm and 50mm lamps.

- Size 17(Dia.) x 9(H)mm
- Cable length 120mm
- Rating 100W 25V



	CAT.	Qty 1+	Qty 10+	Qty 25+
	SL-2735	\$4.95	\$4.45	\$3.90

## FLUORESCENT ADAPTORS

### 20W FLUORESCENT TUBE ADAPTORS T5-T8

Easily convert traditional T8 fluorescent lighting to more energy efficient T5 series tubes. T5 tubes output the same light level as standard T8 tubes while consuming up to 40% less power. By comparison, LED replacements for fluorescent lights use similar power, and/or produce less light, and cost SEVERAL times more. With T8 tubes commonly found in large area lighting systems for offices, schools, small businesses and warehouses the savings achieved using these adaptors adds up very quickly. Installation couldn't be more simple - just remove the old T8 tube & starter, replace with the supplied starter-fuse, attach the two adaptor ends to your new T5 tube, install as per usual, & enjoy the power savings!

NOTE: Not suitable in T8 fittings with electronic ballasts.

	CAT.	Qty 1+
Replaces 20W Tubes	SL-2746	\$5.95



## LED POWER SUPPLIES

In efforts to conserve energy globally, Mean Well has consistently introduced new series of LED Power Supplies. Our range includes a wide range of products which offer higher efficiency, lower power dissipation, compliance with the latest domestic and international lighting regulations. Mean Well LED Power Supplies are ideally suited for

### NON-DIMMABLE - APV SERIES

The APV series is ideal for users looking for a low cost, reliable constant voltage LED driver for use in indoor applications. All models are subjected to a 100% full load burn in test and these LED drivers are backed with a 2 - year warranty. 94V-0 flame retardant plastic is used in the manufacture of the plastic housing and all models feature a full suite of safety protections including short circuit, overload and over voltage protection. The APV-12E and APV-16E Mean Well LED drivers are supplied with a 1.8m input lead and plug.

- 180~264VAC input only
- Rectangular plastic case with IP42 level
- Low cost, small and compact size
- Constant voltage mode for APV-E series
- Suitable for indoor LED lighting and moving sign applications



street lighting, architectural lighting, decorative lighting, embedded lighting, indoor lighting, stage and theatre lighting and LED signage. Because of the robust design and high protection levels against dust and moisture, they can be installed in many indoor and outdoor LED applications.



### DIMMABLE - LPF SERIES

The Mean Well LPF-D series is a plastic bodied - constant current dimmable LED driver. It comes with a 5-year warranty and 1.8m input lead and plug. Models in this range have an IP67 ingress protection rating making them suitable for outdoor applications in tougher environments. These can be used in LED panel lighting, LED downlights, LED decorative lighting, LED tunnel lighting and many other applications.

- 90~305VAC input, built-in active PFC function
- Fully isolated plastic case with IP67 level
- Class II design, without FG
- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance)
- Suitable for LED lighting and moving sign applications
- Supplied with 1.8m SAA approved input lead



**DIMMABLE**

SPECIFICATIONS	MP-3371	MP-3372	MP-3373
Model No.	APV-12E-12	APV-16E-12	APV-16E-24
Output Voltage	12VDC	12VDC	24VDC
Tolerance	+/- 5.0%	+/- 5.0%	+/- 5.0%
Ripple & Noise	120mV	120mV	150mV
Output Current	1A	1.25A	0.67A
Efficiency	81%	79%	82%
Input Voltage	180 ~ 264VAC	180 ~ 264VAC	180 ~ 264VAC
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Cold Start Inrush Current	70A	50A	50A
Weight	80g	100g	100g
Dimensions L x W x D	77 x 40 x 29mm	77 x 40 x 29mm	77 x 40 x 29mm

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
12W	12V	1A	MP-3371	\$29.95	\$26.95	\$23.95
16W	12V	1.25A	MP-3372	\$39.95	\$35.95	\$31.95
16W	24V	0.67A	MP-3373	\$39.95	\$35.95	\$31.95

### LED DRIVERS - ELG SERIES

The ELG series is Mean Well's latest generation of IP67 weather proof LED drivers that come with three in one dimming options.

- 0-10V dimming
- PWM signal dimming
- Resistance dimming
- 100~305VAC input range
- Built-in active PFC function
- No load/standby power consumption <0.5W
- Metal case, IP67 design for indoors or outdoors
- Function options: 3 in 1 dimming (0~10VDC or 10V PWM signal or resistance, dim-to-off);
- Suitable for LED street lighting & outdoor LED lighting
- Constant voltage & constant current mode output
- Supplied with 1.8m SAA approved input lead

\*Note: A PWM signal is used to vary the current amplitude of the output, this LED driver does not have a PWM output.

SPECIFICATIONS	MP-3378	MP-3379	MP-3380	MP-3381
Model No.	ELG-75-12BAU	ELG-75-24BAU	ELG-150-12BAU	ELG-150-24BAU
Output Voltage	12VDC	24VDC	12VDC	24VDC
Tolerance	+/- 3.0%	+/- 3.0%	+/- 3.0%	+/- 3.0%
Output Current	5.0A	3.15A	10A	6.25A
Efficiency	85%	88%	88%	89%
Input Voltage	100 ~ 305VAC	100 ~ 305VAC	100 ~ 305VAC	100 ~ 305VAC
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Cold Start Inrush Current	50A	50A	65A	65A
Weight	800g	800g	950g	950g
Dimensions L x W x D	180 x 63 x 35.5mm	180 x 63 x 35.5mm	219 x 63 x 35.5mm	219 x 63 x 35.5mm

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
75W	12V	5A	MP-3378	\$99.95	\$89.95	\$79.95
75W	24V	3.15A	MP-3379	\$99.95	\$89.95	\$79.95

SPECIFICATIONS	MP-3374	MP-3375	MP-3376	MP-3377
Model No.	LPF-40D-12AU	LPF-40D-24AU	LPF-60D-12AU	LPF-60D-25AU
Output Voltage	12VDC	24VDC	12VDC	24VDC
Tolerance	+/- 5.0%	+/- 5.0%	+/- 5.0%	+/- 5.0%
Output Current	3.34A	1.67A	5.0A	2.5A
Efficiency	84%	87%	86%	89%
Input Voltage	90 ~ 305VAC	90 ~ 305VAC	90 ~ 305VAC	90 ~ 305VAC
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Cold Start Inrush Current	50A	50A	55A	55A
Weight	450g	450g	450g	450g
Dimensions L x W x D	162.5 x 43 x 32mm			

WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
40W	12V	3.34A	MP-3374	\$79.95	\$71.95	\$63.95
40W	24V	1.67A	MP-3375	\$79.95	\$71.95	\$63.95
60W	12V	5A	MP-3376	\$89.95	\$80.95	\$71.95
60W	24V	2.5A	MP-3377	\$89.95	\$80.95	\$71.95

MP-3378



**DIMMABLE**

MP-3380



WATTAGE	VOLTAGE	CURRENT	CAT.	Qty 1+	Qty 3+	Qty 6+
150W	12V	10A	MP-3380	\$119.00	\$106.95	\$94.95
150W	24V	6.25A	MP-3381	\$119.00	\$106.95	\$94.95



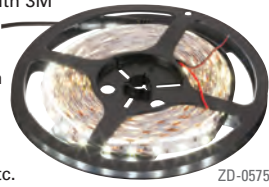
## FLEXIBLE LED STRIP LIGHTING

### FLEXIBLE ADHESIVE LED STRIP - 5M ROLL



When the absolute brightest light possible isn't what you are looking for, then these competitively priced flexible LED strips are what you are looking for. These strips still use the same super efficient 5050 SMD LED package as our ultra bright LED strips, but each LED has around 20-40% less light output than our ultra bright versions.

Everything else is the same; there are 60 LEDs per metre, the flexible strip can be cut into sections every third LED to create separate strips to your desired length, the strip is backed with 3M brand adhesive tape, and each section had solder pads to enable you to wire up to your desired configuration. Sold as a full 5 metre reel in cool white and warm white colours, they are an excellent solution to thousands of lighting applications such as display cabinets, under bench lighting, accent lighting, caravan camping, 4WD, mood lighting, etc.



ZD-0575

SPECIFICATIONS	ZD-0575	ZD-0577
Voltage	12VDC	
Colour	Cool White	Warm White
Current Per Metre	1100mA	
Lumens Per Metre	970lm	950lm

	PRICE PER	CAT.	Qty 1+	Qty 3+	Qty 6+
Cool White	5m Roll	ZD-0575	\$69.95	\$62.95	\$55.95
Warm White	5m Roll	ZD-0577	\$69.95	\$62.95	\$55.95

### ULTRA BRIGHT FLEXIBLE ADHESIVE STRIP - PER SEGMENT



These flexible adhesive LED strips are made using the highest brightness 5060-SMD type LEDs, and feature 60 of these LEDs per metre of stripping. Each strip comes as a 5m length, which can be broken down into individual 5cm sections with 3x LEDs that can be individually soldered to apply power. We understand that not all applications require a full 5m length, so we cut them to length and sell by the 5cm section, so that you can get the exact length you require. The strip itself is a flexible circuit board, backed with quality 3M brand adhesive tape to ensure a long term adhesion to your mounting surface. Powered by 12VDC.



ZD-0570

Two types available:

Note: Compatible with our Aluminium Channel

SPECIFICATIONS	ZD-0570	ZD-0572
Voltage	12VDC	
Colour	Cool White	Warm White
Current Per Segment	50mA (1000mA per metre)	
Lumens Per Metre	1200	
Dimension Per Section	50 x 10mm	

	PRICE PER	CAT.	Qty 1+	1 Metre	5 Metres
Cool White	50mm segment	ZD-0570	\$2.95	\$43.00	\$145.00
Warm White	50mm segment	ZD-0572	\$2.95	\$43.00	\$145.00

### MOTION LED STRIP - 1M

Powered by just 4 x AAA batteries with 30 x LEDs on a flexible strip! Simply switched on and off using the controller, or better still; use the internal motion detector to automatically switch on when there's movement detected!



SPECIFICATIONS	ZD-0586
Lumens	300
Beam Angle	120°
Batteries	4 x AAA (not included)
Power	5VDC @ 2W
LED Life	> 25000 Hours
Weight	56g (excluding batteries)
Dimensions	1m(L) x 7mm(W)

	CAT.	Qty 1+	Qty 5+	Qty 10
	ZD-0586	\$19.95	\$17.95	\$15.95

### MOTION ACTIVATED UNDER-BED LIGHTS

This is ingenious. It essentially contains two long LED strips, which are connected to motion sensors. Simply mount them under your bed. If you get up during the night, or your kids come and greet you before the sun rises, it will automatically create a soft glowing light under your bed to help you see what's going on. If there's no more movement, it will automatically switch off after around 25 seconds. They're mains powered so there's no batteries or recharging to worry about, and each strip has 45 LEDs to create a soft glow. The LEDs are very warm white (around 1600 Kelvin) so they're not jarring at night either. Of course you can override the motion sensor to simply create nice bedroom mood lighting if you like too. Includes everything you need including mains power supply.

- Motion sensor or on/off switch
- 2 x 45 LEDs 1.5m Long
- 3m sensing distance



SPECIFICATIONS	ZD-0588
LED Strip Power	12VDC (Max 3W)
Lumens	240
Dimensions	1.5m(L) x 7mm(W)

LENGTH	CAT.	Qty 1+	Qty 5+	Qty 10
1.5m	ZD-0588	\$49.95	\$44.95	\$39.95

### USB POWERED TRIMMABLE RGB LED STRIP - 1M



Featuring 30 RGB LEDs along a 1m strip, for great light output with colour-changing dazzle. Attach it to your laptop, TV, a wall, wherever you like! Unlike many designs, this light strip can be trimmed down at any of the 30 points between the 30 LEDs, so you can "fit it" to whatever you like. A small remote inline with the power lead provides light mode, colour-change, and on/off controls. Powered from a spare USB port using the provided 1m USB lead.

- IP67 weatherproof
- Customisable length
- Bright RGB LEDs



SPECIFICATIONS	ZD-0571
Lumens	Up to 850 per metre (varies with colour)
Voltage	5-24VDC
Weight	60g
Dimensions	LED Strip: 10(W)mm x 1(L)m, USB Cable Length: 1m

	LENGTH	CAT.	Qty 1+	Qty 5+	Qty 10+
RGB	1m	ZD-0571	\$19.95	\$17.95	\$15.95

### RGB LED FLEXIBLE STRIP LIGHT - 5M ROLL

This is an extremely versatile lighting solution. The 150 RGB LEDs allow you to change the colour to suit your mood, match your shoes, or just change it just because you want to. It uses a handy remote control for all on/off/colour selections, and you can change the brightness of any colour too. You can even trim the LED strip to a shorter length if required. Amazing! Totally flexible and self-adhesive strip. Mains power supply included.

- Remote controlled
- 5m Long
- Self-adhesive
- 150 LEDs



SPECIFICATIONS	SL-3942
Power	12VDC @ 24W Max
Beam Angle	120°
Weight	203g
Dimensions	5m(L) x 10mm(W)

	LENGTH	CAT.	Qty 1+	Qty 5+	Qty 10
RGB	5m	SL-3942	\$59.95	\$53.95	\$47.95

## Tech Talk: Strip Lighting

Our range of LED strip lights are made using some of the most common type of SMD LEDs used in LED lighting products; the 3528 type, and the 5050/5060 type. Their model designations actually come from their footprint dimensions: 3528 = 3.5x2.8mm, 5050 = 5.0x5.0mm, and 5060 = 5.0x6.0mm. The 3528 type is a single LED emitter type in a very compact package, whereas the 5050 and 5060 type are commonly referred to as "triple-chip" due to having three LED emitters built into the one package. The 3528 typically offers superior lumen performance per emitter and greater light efficiency than 5050/5060, but the 5060/5060 triple-chip types are more cost effective due to lower manufacturing and production costs when built into a finished product.



## ✓ FLEXIBLE LED STRIP LIGHTING (CONTINUED)

### RGB LED FLEXIBLE STRIP LIGHTING KIT WITH EFFECTS



An easy to setup RGB LED strip that can produce an array of dazzling effects. The device controls each bank of 3 x LED's individually to create effects that emulate flowing water, a shooting star, curtains opening, a colour gradient and more. Using the remote control you can switch all LEDs to white, red, green, blue, yellow, purple etc, adjust the brightness or set it up to cycle through all the different effects. Lighting applications include cinema foyers, nightclubs, casinos etc. The kit includes a 5m reel of high brightness RGB LEDs with 3M adhesive backing, a power supply remote control, and a joiner to connect LED strips together.

Kit contains:

- 5m RGB LED lighting strip
- Infrared remote control
- Power supply
- LED strip joiner

SPECIFICATIONS	SL-3954
Input Voltage	12VDC
5M Reel Contains	150 X RGB LEDs
Controller Dimensions	94(L) x 58(W) x 25(H)mm



	LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
RGB	5m	SL-3954	\$89.95	\$80.95	\$71.95

### ULTRA BRIGHT IP67 WEATHERPROOF LED FLEXIBLE STRIP LIGHTS



Fully weatherproof yet flexible. They're made from an array of ultra high brightness 5050 SMD-type LEDs, 60 to each metre of strip light. Everything's encapsulated in a protective casing to keep the dust and water out. Weatherproof male / female connections are provided at either end. 12VDC powered. The 1m version can be daisy-chained (up to 5 together), and it's available as a single 5m run too. The 5m version should not be daisy chained, instead run an individual power connection to each 5m length.

SPECIFICATIONS	BOTH
Voltage	12VDC
Colour	Cool White
Current	1000mA per metre
Lumens	850 per metre
LEDs	60 x 5050 per metre
Dimensions	10(W)mm



	LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
Cool White	1m	ZD-0579	\$39.95	\$35.95	\$31.95
Cool White	5m NEW	ZD-0576	\$79.95	\$71.95	\$63.95
Cigarette Lighter Power Lead		PP-1981	\$19.95	\$17.95	\$15.95

### LED GARDEN LIGHT

This is a convenient and fun way to light up your home or garden to get things into party mode! There's no need to hang hooks and find the blown globes. This self-contained unit features an extremely bright 4W RGB LED. You'll be dazzled by a great assortment of illuminating light patterns in a mesmerising display. Mains powered, IP65 weatherproof housing. Includes a garden stake, stand, and wall-mounting kit.

- Dazzling light patterns
- Extremely bright 4W RGB LED
- IP65 Waterproof



SPECIFICATIONS	SL-3403
Power	5V @ 1.2A
Power Consumption	6W
LED	1 x 4W RGB
IP Rating	IP65
Weight	170g (Excluding Stand/Stake)
Dimensions	125(D) x 155(H) x 100(W)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	SL-3403	\$69.95	\$62.95	\$55.95

### RGB UNDERWATER LIGHT 3XAAA

Add some colour with our RGB LED underwater light to your fish tank, vase or any other clear object you would like to light up. The provided IR remote allows you to select up to 12 different colours, 3 different light patterns (solid, fade and jump), and adjust the brightness. The light is IP65 rated with a max depth of 2m.

- Requires 3 x AAA batteries
- Up to 8 hours runtime on solid colour
- Dimensions: 70(Dia) x 28(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	SL-3933	\$19.95	\$17.95	\$15.95

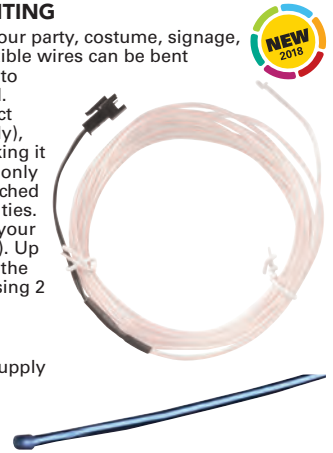
### WHITE 3M EL WIRE LIGHT ELECTROLUMINESCENT LIGHTING

Add amazing colourful lighting to your party, costume, signage, decorations, etc. These 3m long flexible wires can be bent into most shapes and glow (similar to a neon light) when power is applied. Power is provided using the compact EL controller (SL2440 sold separately), which runs off 2 x AA batteries, making it extremely versatile and portable. At only 2.3mm diameter it can be easily stitched into clothing or fastened with cable ties. Excess length can be cut off to suit your application (note: can't be re-joined). Up to 3 x EL wires can be connected at the same time to the same controller using 2 or 3 way splitters (sold separately).

- Dimensions: 3m length x 2.3mm diameter
- Requires SL-2440 EL Wire Power Supply and Controller (sold separately)

Splitter modules sold separately:

- SL-2441 2-way 350mm
- SL-2443 3-way 350mm



	CAT.	Qty 1+	Qty 5+	Qty 10
White	SL-2442	\$9.95	\$8.95	\$7.95
Red	SL-2444	\$9.95	\$8.95	\$7.95
Blue	SL-2448	\$9.95	\$8.95	\$7.95
Green	SL-2446	\$9.95	\$8.95	\$7.95

### EL WIRE POWER SUPPLY AND CONTROLLER ELECTROLUMINESCENT

Small enough to fit in your pocket or stitched into a costume, and can power up to 3 x EL wires using the splitters available separately. Features a pocket clip and a push button to switch between constant or two flash speeds.

Compatible 3m lengths of EL wire sold separately:

Compatible splitter modules:

- SL-2441 2-way 350mm
- SL-2443 3-way 350mm

Note: The controller circuit may emit a high pitch sound when in operation. This is normal due to the built-in inverter.

SPECIFICATIONS	SL-2440
Batteries	Requires 2 x AA batteries (Alkaline or Lithium recommended)
Burn time	Up to 10 hours
Dimensions	90(L) x 32(W) x 27(D)mm (Including pocket clip)

	CAT.	Qty 1+	Qty 5+	Qty 10
	SL-2440	\$9.95	\$8.95	\$7.95

### 2 OR 3 WAY SPLITTER FOR EL WIRE

Connects the SL-2440 EL wire power supply and controller to multiple lengths of EL wire. Available in 2-way or 3-way versions with each outlet capable of connecting a full 3m length of EL wire\*. Power supply/controller and EL wire lengths sold separately.

Two models available:

- SL-2441 2-way 350mm
- SL-2443 3-way 350mm

Compatible 3m lengths of EL wire sold separately:

\* Note: Overall light output will drop when using splitter with full 3m lengths compared to direct connection to power module. To maintain maximum light output the total length connected to the splitter needs to be under 5m.

	CAT.	Qty 1+	Qty 5+	Qty 10
2 Way Splitter for EL Wire	SL-2441	\$2.95	\$2.65	\$2.35
3 Way Splitter for EL Wire	SL-2443	\$2.95	\$2.65	\$2.35



## SOLID LED STRIP LIGHTING

### SOLID LED STRIP LIGHTS - 12VDC

An efficient, bright and affordable LED lighting solution, which is safe and easy to install. Each strip features wide angle, high brightness SMD LEDs which are powered by 12VDC. They are fixed easily using the strong 3M brand self adhesive backing tape or mounted into a range of aluminium and plastic extrusions and diffusers available separately. Each 500mm length can be snapped into individual segments and are powered by either 12VDC or 24VDC. Applications include under cabinet kitchen bench lighting, hallway or mood lighting, arine/caravan/motorhome lighting, commercial strip lighting, retail shop fit outs, and many many more. Available in 8mm and 11mm widths, 12VDC

- 8mm strips fitted with 3528 single chip SMD LEDs
- 11mm strips fitted with 5050 tri-chip SMD LEDs
- Strips can be snapped into individual segments and powered individually
- Strips can be integrated with our aluminium and plastic extrusions and diffusers



SPECIFICATIONS	ZD-0461	ZD-0552
Voltage	12VDC	12VDC
Colour	White	White
Current	200mA	500mA
Lumen Output	150	390
LED Quantity	30 x 3528	30 x 5050
No. Of Segments	10	10
Light Angle	120°	120°
Dimensions	500 x 8mm	500 x 11mm



LEDS	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
30x3528	Cool White	ZD-0461	\$14.95	\$13.35	\$10.35
30x5050	Cool White	ZD-0552	\$24.95	\$22.45	\$17.45

### IP65 LED LIGHTING MODULE STRINGS - 12VDC

A very flexible and weatherproof (IP65) solution for low power lighting; use for backlighting of signs, illuminating stairwells, marine lighting, caravan lighting, etc. Each string is supplied as a 1m length of wire, with ten "modules" containing three high brightness SMD LEDs along the length of the string. You can cut the string to supply power to each module separately if you wish, allowing for a whole host of different applications. Simply provide 12VDC power and you are in business. Available in standard 3528-LED or ultra-bright 5050-LED versions, in cool



SPECIFICATIONS	ZD-0590	ZD-0593	ZD-0594
Voltage	12VDC	12VDC	12VDC
Colour	Cool White	Blue	Cool White
Current	300mA Total	200mA Total	600mA Total
Lumen Output	13.5/135 total	5.1/51 total	50/500 total
LEDS	10x (3x3528)	10x (3x3528)	10x (3x5050)
Light Angle	120°	120°	120°
Dimensions	71x15x5.5mm	71x15x5.5mm	83x17x6mm

LEDS	COLOUR	CAT.	Qty 1+	Qty 10+	Qty 25+
3x3528	Cool White	ZD-0590	\$16.95	\$15.25	\$11.85
3x3528	Blue	ZD-0593	\$16.95	\$15.25	\$11.85
3x5050	Cool White	ZD-0594	\$29.95	\$26.90	\$20.70

### LINKABLE ALUMINIUM LED STRIP LIGHTS - 12VDC

Connect multiple lights together with the included connectors to match your desired length and application. Supplied with a 100mm DC plug with lead for hardwiring, connecting adaptor and cable as well as a right angle adaptor. Screw mounting holes provided on the ends for easy installation in three different ways - 180°, 360° and 90°.

- Suitable in-line Dimmer use ST-3938
- Colour: Cool white
- Input: 3.5 x 1.35mm DC socket centre positive



SPECIFICATIONS	ST-3934	ST-3936
Power Rating	12VDC 5W	12VDC 9W
Colour Temperature	6000-6500K	6000-6500K
Lumens	280	520
Dimensions	324(L) x 30(W) x 12(H)mm	524(L) x 30(W) x 12(H)mm



LEDS	COLOUR	CAT.	Qty 1+	Qty 3+	Qty 6+
48	Cool White	ST-3934	\$24.95	\$22.50	\$19.95
84	Cool White	ST-3936	\$39.95	\$35.90	\$31.90

### LED LIGHT STRIPS WITH SWITCH - 12VDC

A quick and easy LED strip light solution. The LED strip is pre-assembled in the channel diffuser with an integrated switch encased in attractive anodised aluminium alloy. They feature a generous beam angle with evenly distributed light thanks to the frosted white diffuser. Great for use on window displays, restaurant foyers, showrooms, hotels, and caravan or RV applications. Four mounting screws are included for fast and easy installation. Available in 48 and 84 LED strips.

- Input: 3.5 x 1.35mm DC socket centre positive
- LEDS: 3528 SMD
- 4 x mounting screws included

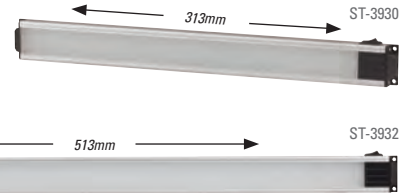
Two models available:

#### 48 LED LIGHT STRIP

ST-3930

#### 84 LED LIGHT STRIP

ST-3932



SPECIFICATIONS	ST-3930	ST-3932
Power Rating	12VDC 5W	12VDC 9W
Colour Temperature	6000-6500K, Cool White	6000-6500K, Cool White
Lumens	280	520
Dimensions	313(L) x 30(W) x 12(H)mm	513(L) x 30(W) x 12(H)mm

Suitable accessories:

#### IN-LINE DIMMER

CAT. ST-3938 - 12VDC/24VDC LED Dimmer Switch

#### SPARE PLUG WITH 100MM LEAD

CAT. ST-3933



LEDS	LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
48	313mm	ST-3930	\$24.95	\$22.45	\$19.95
84	513mm	ST-3932	\$34.95	\$31.45	\$27.90
1.3mm DC Plug on 100mm Lead		ST-3933	\$4.95	\$4.45	\$4.00

### LED ALUMINIUM LIGHT STRIP WITH SWITCH - 240VAC

A range of LED aluminium light in elegant aluminium strips. A simple and straight forward solution; each strip is terminated with a 240V plug and lead. No time consuming wiring and costly electricians are required. Simply plug in to the mains outlet and you have instant lighting solution. It has a built-in switch and is IP44 rated making it ideal for kitchen, under cabinets, book cases, bathroom lighting applications. Power consumption is significantly lower than fluorescent alternatives.

- LED Light strips meet SAA Safety approvals.



SPECIFICATIONS	ST-3946	ST-3948
Voltage Input	240VAC	240VAC
IP Rating	IP44	IP44
Colour Temperature	Cool white	Cool white
LEDS	48	78
Lumens	650	950
Length	850mm	1200mm



LEDS	LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
48	850mm	ST-3946	\$54.95	\$49.45	\$43.95
78	1200mm	ST-3948	\$64.95	\$58.45	\$51.95

### LED DIMMER SWITCH - 12VDC

Compact in-line dimmer suitable for dimmable LED lights. Rotate ON/OFF and to adjust light level. Supplied with DC jacks for easy connection between LED lights and your power supply unit

- Suitable for use with our LED strip lights ST-3930, ST-3932, ST-3934 and ST-3936



SPECIFICATIONS	ST-3938
Operating Voltage	12VDC
Output Current (Max)	2A
Output Power (Max)	24W/48W
Dimming	0 to 100%
Colour	White
Dimensions	68(L) x 34(W) x 33(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
In-Line Dimmer 12V	ST-3938	\$14.95	\$13.45	\$11.95

For LED strip joiners please see page 195.

## LED Cabin Lighting:

LED lighting fixtures are ideal for areas that do not have mains power. LED lights draw such a small amount of current for their light output battery power (generally AA cell is all that is necessary). Indeed many fixtures have inbuilt battery compartments or simply require a 12V source. An interesting development has been the 'NOOK' lights on page 427. All units can be wired by DIY handy people. They are 12V safe or battery. They are idea for caravans, sheds, boats - even cubby houses. With these products you never need to be scared of the dark again!

### MINI LED LIGHT

Pre wired in a sleek and compact design, this is a perfect mini LED light for illuminating harsh areas. Using new advanced lens technology the LEDs increase light output for optimal lighting with minimal power. The 12 volt light draws 10% of the power of conventional lights. Sealed stainless steel construction allow for placement in tight spaces and harsh environments. Horizontal and vertical mounts provide a variety of mounting options. Can be used in step, board, accent lighting as well as marine applications!

- 12VDC
- Dimensions: 39(W) x 12.7(H) x 12.7(D)mm

LUMENS	CAT.	Qty 1+	Qty 3+	Qty 6+
24	ST-3193	\$15.95	\$14.35	\$12.75

### 12 WHITE LED ROOF MOUNT INTERIOR LAMP

Simple to install and use LED roof lamp for your motorhome, truck, or boat.

- 12 high brightness cool white LEDs and a on/off switch

SPECIFICATIONS	SL-3452
Power	12V
Colour	Cool White
LED	12 x LED
Light Output	140 Lumens
Dimensions	185(L) x 126(W) x 25(H)mm

LUMENS	COLOUR	CAT.	Qty 1+	Qty 5+	Qty 10+
140	Cool White	SL-3452	\$29.95	\$26.90	\$23.70

### CIRCULAR 36 LED - 190 LUMEN CABINET LIGHT - TOUCH SWITCH

A stylish and compact LED Cabinet Light suitable for caravan, marine, 4WD, auto and domestic applications. Touch the aluminium casing to turn the light on and off. Screw mounting holes in base hidden behind removable aluminium trim for neat and easy installation.

SPECIFICATIONS	ST-3915
Input Voltage	9 - 30VDC (works on 12V and 24V systems)
Uses	36pcs of 3528 SMD LEDs
Lumens	190
Power Consumption	3W
Colour Temperature	Cool white 5500K
Dimensions	70(Dia.) x 9(H)mm

LUMENS	COLOUR	CAT.	Qty 1+	Qty 3+	Qty 6+
190	Cool White	ST-3915	\$34.95	\$31.45	\$27.90

### ULTRA-SLIM LED PANEL CABIN ROOF LIGHTS

These stylish lights are just 7mm thick. Mount them to the roof of your caravan, RV or boat for a bright, cool white light around the cabin. The side-lit LED panel design produces an evenly spread light. They are easy to install & mounting hardware is included.

- Voltage: 12VDC
- LED Type: Epistar®, cool white
- Beam pattern: 120°
- Three brightness options available
- Non-dimmable

SPECIFICATIONS	SL-3474	SL-3476	SL-3478
Lumens	350	590	680
Power Consumption	6W(500mA)	8W(660mA)	10W(830mA)
Dimensions	118(Dia.) x 7(D)mm	165(Dia.) x 7(D)mm	215(Dia.) x 7(D)mm

LUMENS	DIA.	CAT.	Qty 1+	Qty 5+	Qty 10+
350	120mm	SL-3474	\$34.95	\$31.45	\$27.90
590	165mm	SL-3476	\$44.95	\$40.45	\$35.90
680	215mm	SL-3478	\$59.95	\$53.95	\$47.95

### 6 X WHITE LED AWNING LIGHT

A simple to install light to provide illumination under a caravan or boat awning.

- Features two mounting holes on either edge and should be wired up to an on/off switch

SPECIFICATIONS	SL-3459
Input Voltage	12 - 24VDC
LED	6 x Cool white LED
Light Output	140 Lumens
Dimensions	250(L) x 85(W) x 35(H)mm

LUMENS	COLOUR	CAT.	Qty 1+	Qty 5+	Qty 10+
140	Cool White	SL-3459	\$29.95	\$26.95	\$23.95

### WATERPROOF CEILING MOUNT LED LIGHT

Improve the illumination in your caravan, car, truck or boat with this ceiling mount LED light. Waterproof and easy to install, the 42 high brightness LED's add more than enough light for your interior.

SPECIFICATIONS	SL-3448
LED	42
Output	4.2W
IP Rating	IP66
Power	12-24VDC
Dimensions	145(Dia.) x 28(H)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
200	SL-3448	\$39.95	\$35.90	\$31.90

### SOLID HIGH POWER IP67 LED CEILING/DECK LIGHT

This LED light is probably the toughest and brightest we've discovered in our search for the best in LED lighting. Made with powder coated die cast aluminium alloy, fitted with ten 3W Epistar LEDs sealed in resin, and using high quality American brand driver circuitry with pulse width modulation, this light is perfectly suited to marine environments or any other outdoor location totally exposed to the elements.

- Install can be either as a surface mount using the supplied mounting ring and gasket, or flush mount requiring just 10mm of mounting depth

SPECIFICATIONS	SL-3480
Input Voltage	9-36VDC
Power	30W
Lumens	1600 lumen
Beam Type	flood (120° angle)
LED Type	10x Epistar 3W
Operating Temp	-30°C to 50°C
Dimensions	217(Dia.) x 16(H)mm

LUMENS	COLOUR	CAT.	Qty 1+	Qty 5+
1600	Cool White	SL-3480	\$89.95	\$80.95

### CEILING LAMPS WITH SWITCH

A fixed installation ceiling lamp suitable for a caravan, boat, truck, or even a car. The LEDs sit behind a diffuser to help spread the light evenly. Mounting holes on the backing will allow attachment to the roof.

12 LED	SL-3460
30 LED	SL-3461

SL-3460	404mm
SL-3461	398mm

SPECIFICATIONS	SL-3460	SL-3461
Power	12/24VDC	12/24VDC
Colour	Cool white	Cool white
LED	12 x LEDs	30 x LEDs
Light Output	280 Lumens	320 Lumens
Dimensions	404(L) x 88(W) x 28(H)mm	398(L) x 108(W) x 31(H)mm


LUMENS	COLOUR	CAT.	Qty 1+	Qty 5+	Qty 10+
280	Cool White	SL-3460	\$59.95	\$53.95	\$47.95
320	Cool White	SL-3461	\$99.95	\$89.95	\$79.95



## LED CABIN LIGHTING (CONTINUED)

### LED LIGHT WITH SOFT TOUCH SWITCH

Installs in seconds, without wiring. Touchsensitive on/off operation so there's no fumbling for a switch in the dark. Includes self-adhesive pad. Uses a bright LED light for energy efficiency. Pack of two lights.

SPECIFICATIONS	SL-3501			
Lumens	15			
Battery	Requires 3 x AAA batteries each			
Dimensions	28(H) x 76(D)mm			
LUMENS	CAT.	Qty 1+	Qty 3+	Qty 6+
15	SL-3501	\$9.95	\$8.95	\$7.95

### REMOTE CONTROL 3 PIECE LED PUCK LIGHT SET

This amazing kit of three LED puck lights takes the hassle out of adding lighting to, well just about anywhere! Each puck light contains not one, two, or three, but 5 ultra bright LEDs. There's no pesky wiring to get them to work though just install three of your favourite AA batteries in to each light and put them in a location that's begging to end the darkness. The included adhesive tabs also mean no screws are required! But these aren't your average puck lights, there's a central remote control to control them all! The remote control then caters for centralised on and off functionality, as well as a "low brightness" dim setting, or set them to turn off in 30-minutes automatically. Not near the remote? Simply press a puck light and it will turn on for you too. Amazing!

- High / low brightness modes
- 30 minute auto-off option
- Can be operated by remote or directly on each LED puck light
- Peel and stick adhesive
- No wiring required



SPECIFICATIONS	SL-3511			
Batteries	Puck Lights: 3 x AA Each (Not Included) Remote Control: 2 x AAA (Not Included)			
Remote Transmission Range	8m Max.			
Weight	Puck Lights: 131g Each (Including Batteries) Remote Control: 51g (Including Batteries)			
Puck Light Dimensions	95(Dia.) x 30(H)mm Each			
LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10
Remote Control 3 Piece Set	SL-3511	\$19.95	\$17.95	\$15.95

## NOOK SENSOR LIGHTS - BATTERY POWERED

These very compact devices can fit in a small dark space and light it up for you and turn off automatically when you depart. There is no need for expensive mains wiring to be fitted. They all work from low cost penlite-type batteries which can last for years. You can stick them anywhere with double-sided tape or even hang them from a nail driven in a wall. They are ideal for clothes cupboards, shower recesses (safe), pantries, in boats, caravans and motor homes.

### EXTRA BRIGHT LED SENSOR LIGHT

This unit is tubular in outward appearance, measuring 255(W) x 22(Dia.) x 30(H)mm. It features a sturdy, stainless steel mounting bracket. The design allows the light to rotate even though the bracket is screwed to a surface. The movement detector rotates on the same axis as the 9x High efficiency white LEDs. (The LEDs sit behind a diffuser for even light. The unit is powered by 3 x AA batteries (not supplied). Sensor on time 60 seconds approx.

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
80	SL-3506	\$19.95	\$17.95	\$15.95

### COMPACT SWIVEL LED SENSOR LIGHT

This unit, which is moulded in an attractive gun metal grey plastic, measures 178 (W) x 60(D) x 23 (H)mm. It contains space for 3 x AAA batteries (not supplied) but also has a DC socket for a 4.5V mains adaptor. A separate fitting allows screw fitting to a flat surface. The swivel-adjustable movement detector has 6 x high-efficiency white LEDs in the same housing. Sensor 'on' time 60 seconds approx.

LUMENS	CAT.	Qty 1+	Qty 5+
22	SL-3507	\$14.95	\$13.45

### HOOK MOUNT LED SENSOR LIGHT

This unit which measures 300(W) x 30(H) x 23(D)mm features an adjustable movement detector. It has ON/OFF/AUTO (movement detector switched on auto) and a bright light thanks to a bar of 5 x white high efficiency LEDs. It is powered by 6 x AA alkaline cells (not supplied). White in colour overall. It also has a large hanging hook (which is big enough to fit over a clothes railing). An ideal clothes wardrobe light. Sensor on time 60 seconds approx.



LUMENS	CAT.	Qty 1+	Qty 5+
200	SL-3508	\$19.95	\$17.95

## PORTABLE LIGHTING




### 2,000 LUMEN 4 BAR LED CAMPING KIT

This is a fast and effective way to provide light for a campsite, worksite, or anywhere you like. It's built from four individual aluminium LED light strips, each one featuring 30 LEDs for 500 Lumens of light. That's 2,000 Lumens for the whole kit, which is a lot of light! Everything is plug and play, with two 5m cables, two 2.5m cables, two 1m cables, four 0.5m cables, and a 3 to 1 joiner, you can connect them however you like to suit your particular use. A remote control for brightness and on/off is included, as well as three on/off dimmer switches, all contained in a convenient nylon carry case. They're powered by 12VDC, with battery clips and a cigarette lighter socket provided. You can easily run from mains power using a 12V adaptor too.

- IP68 rated LED light bars
- Extremely high 2,000 lumen output
- Includes nylon carry case

**SUPPLIED WITH CARRY BAG**



SPECIFICATIONS	SL-3969			
Working Voltage	12VDC			
Rated Power	4 x 7W			
Colour Temperature	6000K			
IP Rating	IP67 (LED Strips)			
Working Current	2.33A			
Light Bar Dimensions	520(H) x 13(W) x 7(D)mm			
LUMENS	CAT.	Qty 1+	Qty 3+	Qty 6+
4 x 500	SL-3969	\$169.00	\$151.95	\$134.95

## PORTABLE LIGHTING

### SOLAR LIGHT KIT WITH USB PORT

The main unit features 2 x 3W LED lights builtin with two different brightness settings. The carry handle makes it a useful portable lantern.

- 3 individually switched LED lights (2 x 3W and 1 x 2W) with 5m leads
- Provides up to 15 hours of light (lowest brightness)
- USB output
- Dimensions:  
Solar panel: 256(L) x 143(W) x 15(D)mm  
Base unit: 190(H) x 100(W) x 75(D)mm



LIGHTS	CAT.	Qty 1+	Qty 2+	Qty 4+
3	MB-3693	\$79.95	\$71.95	\$63.95

### SOLAR LIGHT KIT WITH USB PORT & REMOTE CONTROL

Uses a Li-ion battery to make it light and compact, making it great for camping applications or where space is a premium. Operate via remote control for added convenience.

- 3 individually switched (via remote control) 3W LED lights with 5m leads
- Provides up to 18 hours of light (lowest brightness)
- USB output
- Dimensions:  
Solar panel: 150(L) x 180(W) x 17(D)mm  
Base unit: 140(L) x 100(W) x 25(D)mm



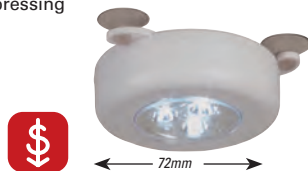
CAT.	Qty 1+	Qty 2+	Qty 4+
MB-3699	\$99.95	\$89.95	\$79.95

## SOLAR CHARGED

### WINDOW MOUNT SOLAR RECHARGEABLE LED PUCK LIGHT

Designed to suction cup mount onto a window so that the rear mounting solar panel charges the internal battery during the day. Turn on the 3 x built-in bright white LEDs by simply pressing the front lens, press again to turn off.

- Solar rechargeable
- Easy one-touch ON/OFF operation
- Battery type: Built-in Ni-MH
- LED colour: Cool white
- Dimensions: 72(Dia.) x 23(D)mm



LUMENS	CAT.	Qty 1+
10	Cool White	SL-3500
		\$4.95

### SOLAR MOTION 20XLED WALL LIGHT WITH PIR & NIGHT SENSOR

Fantastic technology for set-and-forget convenience, and security. An all-in-one tidy unit that charges by day, and illuminates by night. The built-in motion sensor means it's not needlessly wasting its stored power, and 20 x LEDs illuminate the area with bright white light. Of course there's a night sensor to ensure the unit doesn't operate through the day too.

- Wall mounting
- Includes installation kit

SPECIFICATIONS	SL-3503
Lumens	180
Solar Panel	0.55W
Battery	3.7V 800mAh
Light Sensor	<10 Lux
Motion Detector Angle	120°
Motion Detector Distance	3m
Dimensions	95(W) x 124(H) x 48(D)mm



LUMENS	CAT.	Qty 1+	Qty 3+	Qty 6+
180	SL-3503	\$19.95	\$17.95	\$15.95

### PORTABLE LED SOLAR RECHARGEABLE SENSOR LIGHT

Totally portable and easy to use. The built-in motion sensor activates a bright 1W LED for 10-seconds. The sensor can also be overridden to stay on if required. It's self-recharged through the day using the integrated solar panel, and can provide up to 1hr of continuous light from the battery. It has a magnetic mount to rapidly attach / detach as needed. A metal plate and mounting hardware is included for non-ferrous surfaces such as timber or masonry too.

- Simple magnetic mounting (includes hardware)
- 2 light modes: sensor / continuous
- Rechargeable battery via solar panel

\*LED Bulb & Battery cannot be replaced



SPECIFICATIONS	SL-3510
Lumens	110
Power	1W
Battery	3.6V 500mAh Ni-Hydrogen Rechargeable
Sensor Light Time	10 Seconds
Battery Life	380 Times (Sensor) 1 Hour (Continuous)
IP Rating	IP43
Weight	250g
Dimensions	132(H) x 90(D) x 82(W)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
SL-3510	\$29.95	\$26.95	\$23.95

### 7W SECURITY LIGHT WITH SOLAR RECHARGING

Featuring a 7W COB LED for massive 1,000 lumen white light output, with an integrated PIR motion detector to switch the light on only when movement is detected. An integrated battery is recharged using the included solar panel, which can be mounted up to 4m away for optimum sunlight. The system is rated at IP65 to stand tough against poor weather. Includes everything to install, including mounting hardware.

- High / low light selection
- No mains power required
- Fully self-contained



SPECIFICATIONS	SL-2799
Light Output	High: 1,000 lumens Standard: 500 lumens
LED Power	7W
Battery	3.7V 1,800mAh Li-ion
Weatherproof Rating	IP65
Working Time	High Mode: Up to 2 hours Standard Mode: Up to 4 hours
Detection Distance	Up to 10m
Weight	509g
Dimensions	154(W) x 183(H) x 86(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
SL-2799	\$79.95	\$71.95	\$63.95

### RECHARGEABLE SOLAR SENSOR LIGHT

This rechargeable solar sensor acts as a deterrent against thieves with its security camera appearance. A fully self-contained unit with rechargeable battery and solar panel so it will always keep it charged. Automatically turns on at night whenever movement is detected with the PIR sensor.

SPECIFICATIONS	SL-3239
Sensor Angle	0-70°
Solar Panel Input	1.6W
Solar Panel Output	5V, 300mA
Battery	3.7V, 2000mA



CAT.	Qty 1+	Qty 5+	Qty 10+
SL-3239	\$69.95	\$62.95	\$55.95

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!



## ✓ SUPER BRIGHT LED WORKLIGHTS / FLOODLIGHTS

Once again LEDs have revolutionised the established concept at floodlights and work lights. Up until recently a workshop light meant trailing a dangerous 240V lead, often across a wet or greasy floor. Now these devices are often 12V powered (there are still powerful 240V models for all night marathons). The portable ones are also great for outdoor functions at night, as well as camping and fishing outdoors. Once you have appreciated the portability of these bright, rugged and lightweight lamps you will wonder how you did without them.

### 5W PORTABLE LED WORK LIGHT

Ultra rugged and totally portable. A huge 5W COB LED provides amazing light output with low heat. Convenient fold-out stand. Perfect for the work site, camping, and more. High / low light modes to suit your requirements.

- Fold-out stand
- High and low light settings
- Durable case



SPECIFICATIONS	SL-2869
Power	5W
Batteries	4 x AA (Not Included)
Weight	544g (Including Batteries)
Dimensions	182(W) x 130(H) x 55(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
	SL-2869	\$19.95	\$17.95	\$15.95

### SLIMLINE LED WORKLIGHTS - IP65 - 240VAC

Avoid the heat and hassle of traditional Xenon / Halogen worklights. They're power hungry, generate a lot of heat, and there's nothing worse than a blown globe while you're trying to see what you're doing. These lights feature an integrated floor stand, and put out plenty of ultra-white bright light. They use far less power than their traditional counterparts, which is especially important when running from a generator or inverter power. They're IP65 rated so won't mind a little rain, and they're tough, so you don't have to wrap them in cotton wool to transport them in the back of your ute either. 10W and 30W versions available.

- Ultra-Bright Cool White LEDs
- Integrated Floor Stand
- Weatherproof Design
- Removable Slimline Bracket



SPECIFICATIONS	BOTH
Ingress Protection	IP65
Weight	SL-2866 - 0.8kg, SL-2867 - 1.4kg
Dimensions	SL-2866 - 142(W) x 215(H) x 161(D)mm, SL-2867 - 215(W) x 290(H) x 180(D)mm
Power	240VAC
Mains Lead	1m

LUMENS	WATTS	CAT.	Qty 1+	Qty 4+	Qty 10+
650	10W	SL-2866	\$24.95	\$22.45	\$19.95
2100	30W	SL-2867	\$59.95	\$53.95	\$47.95

### 10W RECHARGEABLE LED WORK LIGHT

With a rubberised protective surround, this LED work light is a rugged addition to your work equipment. It's rechargeable for around a 3-hour run time of each charge, and there are four light modes which include high, medium, low and flashing. It also provides a USB charging port so it can be used as a battery bank too! There's a charge level indicator to keep an eye on remaining charge, and it includes a versatile stand with adjustable angle too. Includes a USB charging cable.

- High, Medium, Low & Flashing Modes
- USB Charging Port
- Battery Level Indicator
- Charge & Discharge Protection



SPECIFICATIONS	SL-2858
LED	10W COB
LED Colour	Cool White
Lumens	100
Burn Time	3 hours
Charging Time	5 hours
Charging Input	5VDC, 1A
Battery	Li-Ion 3.7V, 4400mAh
USB Charging Port	5VDC, 1A
IP Rating	IP54
Dimensions	172(W) x 127(H) x 46(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10
10W Rechargeable LED Work Light	SL-2858	\$49.95	\$44.95	\$39.95

### 20W RECHARGEABLE LED WORK LIGHT

This rechargeable LED work light provides around a 3-hour run time of each charge, and there are four light modes which include high, medium, low and flashing. It also provides a USB charging port so it can be used as a battery bank too! There's a charge level indicator to keep an eye on remaining charge, and it includes a 360° adjustable bracket. Includes a USB charging cable and USB mains power adaptor.

- High, Medium, Low & Flashing Modes
- USB Charging Port
- Battery Level Indicator
- 360° Rotatable Bracket
- Charge & Discharge Protection



SPECIFICATIONS	SL-2859
LED	20W COB
LED Colour	Cool White
Lumens	1800
Burn Time	3 hours
Charging Time	4 hours
Charging Input	5VDC, 2A
Battery	Li-Ion 3.7V, 6600mAh
USB Charging Port	5VDC, 1A
IP Rating	IP65
Dimensions	260(W) x 173(H) x 120(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10
20W Rechargeable LED Work Light	SL-2859	\$99.95	\$89.95	\$79.95

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\* Some products excluded and ABN will be required  
– see website, T&C or Store Manager for details.





## WORKLIGHTS HANDHELD

### 100 LUMEN COMPACT LED WORKLIGHT

Keep it in the glove box, toolbox, back of the car, kitchen drawer, or anywhere you think you might need to keep such a neat and compact little work light. Features a fold out hook and adjustable arm with magnetic base. Also has 3 x LEDs at the top to use as a torch.

- Dimensions:  
Hook folded: 98(H) x 67(W) x 34(D)mm  
With hook extended: 138(H) x 67(W) x 34(D)mm



LUMENS	CAT.	Qty 1+
100	ST-3270	\$4.95

### 250 LUMEN COB WORKLIGHT

The sleek body of this worklight resembles a nice remote control, but push the "on button" and you'll light up a room! Powered by 3 x AA batteries, it puts out a huge amount of light, with a good spread to light up what you're doing. The case also features a hang-hook, and magnet in the back to "stick" it to any ferrous metal quickly (ie, the shed wall, a steel beam, a car bonnet, etc). Awesome!



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
250	ST-3271	\$6.95	\$6.25	\$5.55

**What is COB? COB means "chip-on-board" & describes individual LED chips mounted on a common substrate i.e. board. It produces a brilliant diffused light source.**

### 250 LUMEN COB WORKLIGHT WITH STAND

A rugged rubberised ABS case holds a high power 3W COB LED worklight, as well as an ultrabright LED on one end for use as a torch. A fully integrated stand and hang-hook give you flexibility, and 2 x AA batteries keep you going. It's very lightweight and rugged to go where you want. It also features a magnetic base for superconvenient mounting to most ferrous metals.



SPECIFICATIONS	ST-3273
Light	3W COB
Lumens	250
Battery	3 x AA (not included)
Weight	244g
Torch Dimensions	225(L) x 50(W) x 40(H)mm
Stand Dimensions	110(H)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
250	ST-3273	\$9.95	\$8.95	\$7.95

### MAGNETIC LED WORK LIGHT WITH TORCH

One of the most convenient worklight designs around. Powerful 360 lumen illumination with a fantastic light spread, or use the integrated torch, all fitted in a well moulded wand-style case. Includes magnets to quickly mount to any ferrous metal surface, as well as a hang hook. Requires 4 x AA batteries.

- Magnetic / hook mounting
- Durable case
- Worklight and torch mode



SPECIFICATIONS	ST-3218
Lumens	360
Batteries	4 x AA (Not Included)
Weight	76g
Dimensions	40(W) x 288(H) x 27(D)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
	ST-3218	\$9.95	\$8.95	\$7.95

### MULTIPLE MOUNT LED WORKLIGHT

This unit features 3 mounting configurations – a magnet to attach to steel car/truck bodies, a sturdy hook hanger and a tilting 'ball' to sit on a floor at a convenient angle. The main light itself is a COB (chip on board) array of 27 LED lights on two light settings: very, very bright and just bright. There is a torch-type LED light on one end to view into confined spaces. The main light is rated at 250/200 lumens and the torch at 80 lumens. It is compact at 150L x 55W x 23D and will easily fit into a glove box or tool kit until it is needed. It will fit into a pocket nicely as well.

- Yellow with soft black accented hand grip
- Main light output: 250/200 lumens
- Torch output: 80 lumens
- Requires 4 x AA Batteries
- Dimensions: 150(L) x 55(W) x 23(H)mm



CAT.	Qty 1+	Qty 5+	Qty 10+
ST-3250	\$12.95	\$11.45	\$9.95

### 35 LUMEN LED KEYRING LIGHT WITH CLIP

Has keyring/lanyard fitting and pocket clip. Super-bright COB (clip on board) LED array. 3 settings, astonishingly bright, bright & flashing. (Flashing could be used to bring attention.)

Has special feature so that button battery compartment cannot be accessed by children, who have been known to access button batteries and swallow them.

- Assorted colours
- Battery life is incredible
- Dimensions: 55(L) x 30(W) x 18(D)mm



CAT.	Qty 1+	Qty 5+	Qty 10+
ST-3429	\$4.95	\$4.45	\$3.95

### UNIVERSAL GOOSE NECK WORK/ CAMPING LIGHT

Equipped with a magnet on the base and a flexible gooseneck, this powerful COB LED lamp can be attached and positioned to project the light to exactly where you want it.

- 1W power consumption
- 120 lumen output
- Powered by 3 x AAA batteries (not included)
- Dimensions: 200(L) x 30(Dia)mm



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
120	ST-3470	\$9.95	\$8.95	\$7.95

### 160 LUMEN COB LED WORK LIGHT & TORCH

Ultra light and compact, with a handle belt / pocket clip. Quickly select between worklight mode and torch mode, depending on your requirements. It's made from rubberised plastic so it's durable, but comfortable in your hand too. It also features a small magnet on the back to quickly grab on to any ferrous metal for handsfree operation.

- Worklight or torch mode
- Ultra bright & energy efficient
- Magnetic and belt clip



SPECIFICATIONS	ST-3471
Requires	3 x AAA Batteries
Dimensions	175(L) x 34(W) x 14(H)mm, 82g

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
160	ST-3471	\$6.95	\$6.25	\$5.55

### SUPER BRIGHT LED TORCH WITH MAGNETIC HEAD & TELESCOPIC NECK

A pen-sized torch with super bright LEDs and magnetic head for picking up objects. The torch head is attached to a telescopic mast hidden away inside the casing. Fully extended the torch has a total length of 546mm allowing your search into cracks and crevices.

A gooseneck at the end allows you to shine light around corners & pick up metallic objects out of reach.

- Requires 4 x LR44 batteries (included)
- Dimensions: 165(L)mm to 550mm (neck fully extended); 20mm (torch head diameter)



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
50	Telescopic ST-3463	\$9.95	\$8.95	\$7.95

## LED TORCHES:

The Americans call a torch a 'flashlight'. Why? Because in the early days batteries were so poor and light globes so inefficient, you could only turn the torch on for a second or so, i.e. "flash" to save the battery and still see where you were going in the dark. Well, batteries got better, but torch globes stayed hopeless but at least we could keep the torch on for a while. Now almost all torches use LED-type globes. LEDs draw about 1/50th the current of old globes so you can leave the torch on all the time. Even better, LED globes are far, far brighter. Even though we have an extensive range, you will have difficulty making a mistake when choosing a LED torch. They are all good.

### BLOCKLITE 9V BATTERY LIGHT

The torch unit itself is uniquely designed to clip onto a standard 9V battery. Selectable 2 or 6-LED operation. Even though it'll feel like the battery lasts forever, once it finally runs flat, just replace with any standard 9V battery.

- 2 or 6 LED mode
- Over 30 hours burn time

SPECIFICATIONS		ST-3367		
Battery		9V Alkaline		
Weight		7g (excluding battery - approx 45g with battery)		
Dimensions		24(H) x 24(W) x 15(D)mm (excluding battery) 69(H) x 24(W) x 15(D)mm (including battery)		
LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
	ST-3367	\$7.95	\$7.15	\$6.35

### 100 LUMEN LED TORCH

You don't need one of these, you need three! This 100-Lumen LED torch will run for up to 12 hours on the included AAA batteries, and is compact enough to store anywhere. Perfect for the emergency kit, the glove box, the go bag, anywhere you need it.

- Super bright COB
- 12 hours burn time
- Compact and convenient

SPECIFICATIONS		ST-3432		
Batteries		3 x AAA (Included)		
Lumens		100		
Beam		12m approx		
Burn Time		12 Hours		
Mode		On/Off		
Weight		63g (Including Batteries)		
Dimensions		98(H) x 30(Dia.)mm		
LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10
100	ST-3432	\$4.95	\$4.45	\$3.95

### 6 X OLSON OSRAM LED TORCH

High brightness torch featuring 6 x ultra bright warm white Olson Osram LEDs. Great addition to your fishing tackle box or keep one in the car for emergency situations. Bright yellow plastic so it doesn't go missing.

- Requires 4 x AA batteries
- Dimensions: 190(L) x 60(Dia.)mm

LUMENS		CAT.	Qty 1+
300		ST-3486	\$4.95

### THREE PACK 60 LUMEN TORCHES WITH 6 X AA BATTERIES

This is a pack of THREE torches complete with batteries.

They are powerful 60 lumen units. You take them out of the packet, load the batteries, test and put in three separate locations so you are prepared for the next blackout.

Better still buy 2 packs and have six separate "hiders". They represent excellent value.

Batteries included.

LUMENS		CAT.	Qty 1+	Qty 5+	Qty 10+
60 x 3		ST-3430	\$14.95	\$13.45	\$11.95



### 190 LUMEN TORCH WITH ADJUSTABLE LENS WITH CREE® LED

This Cree® LED torch is encased in a rugged aircraft-grade aluminium that will withstand the rigours of constant use. Tactile switches are standard allowing for momentary on lighting, perfect for signalling across distances in poor light or for quickly checking a map.

- 190 lumens
- Tactical switch
- Multiple light modes
- Adjustable beam

SPECIFICATIONS		ST-3456	
Lumens		190	
Burn Time		2.4 hours	
Dimensions		105(L) x 34(Dia.)mm	
Battery (Required)		3 x AAA, batteries	
Light Modes		Max, medium, low, SOS, blinking	
Accessories		Carrying Strap	
LUMENS	CAT.	Qty 1+	
190	Adjustable	ST-3456	\$7.95

### 150 LUMEN ADJUSTABLE BEAM MINI CREE® LED TORCH

This heavy-duty torch is suitable for any adventure. Small enough to fit into most pockets, yet powerful enough to cast ample light where and when you need it. When you require a focused beam, adjust the light by twisting the handle clockwise. When a wide beam is preferred, simply twist it anticlockwise. Features two light modes to choose from: high & low. Just press the button at the end of the handle to alternate between the two. The durable design features an o-ring seal to ensure dirt and moisture stay out. Take advantage of the ergonomic handle grip or use the attached clip for hands-free transport and operation.

SPECIFICATIONS		ST-3481		
Light Modes		High & Low		
Lumens		150		
Batteries		1 x AA (not included)		
Burn Time		10 hours		
Beam Distance		120 metres		
Beam Angle		5-60°		
Dimensions		100(L) x 26(Dia.)mm		
Weight		54g (including battery)		
LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
150	ST-3481	\$10.95	\$9.85	\$8.75

### 300 LUMEN LED TORCH WITH ADJUSTABLE LENS

Compact and lightweight metal construction, with an integrated beam adjustment. Simply twist the head to change from spot to flood modes. Includes a convenient belt clip, with high / medium / low power and flashing modes. 3 x AAA batteries required.

- Belt clip
- High, medium, low, flashing modes
- Durable case

SPECIFICATIONS		ST-3449		
Batteries		3 x AAA (Not Included)		
Lumens		300		
Weight		124g (Including Batteries)		
Dimensions		122(L) x 31(Dia.)mm		
LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
300	ST-3449	\$14.95	\$13.45	\$11.95

## LED TORCHES (CONTINUED)

### 370 LUMEN USB RECHARGEABLE LED TORCH - ADJUSTABLE BEAM

A great little LED torch with 370 lumens of bright white light, and a slide adjustable beam to go from a wide flood beam to a narrow spot beam. Features a 2,200mAh lithium ion 18650 rechargeable battery, which you can recharge inside the torch by plugging into any USB port. Charge it off your computer or the charger from your mobile phone - USB charging is literally everywhere! Add to that the tactical style switch, multiple operating modes (100%, 50%, and SOS) and it's a winner.



SPECIFICATIONS	ST-3490
Lumens	370
Burn Time	4 hours (at 100%)
Battery	1x 18650 Li-ion 2200mAh included
Light Modes	High, low, SOS
Dimensions	150(L) x 37(Dia.)mm



LUMENS		CAT.	Qty 1+	Qty 5+	Qty 10+
370	Adjustable	ST-3490	\$29.95	\$26.95	\$23.70

### 400 LUMEN 8W CREE® LED TORCH

Made from lightweight aluminium, packing a huge punch with an 8W CREE® LED. Features high/low selection. Burn time is a massive 5+ hours, up to 10hrs in low power mode. Very durable and so bright. For this price, you'll want more than one!



SPECIFICATIONS	ST-3477
Lumens	400
Burn Time	5 hours (at 100%)
Batteries	3 x AAA required
Light Modes	High, low
Dimensions	132(L) x 35(Dia.)mm



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
400	ST-3477	\$19.95	\$17.95	\$15.95

### 500 LUMEN 8W CREE TORCH - LARGE BEAM ADJUSTMENT

The o-ring seals ensure dirt and moisture stay out, while the ergonomic, non-slip handle ensures you maintain a tight grip at all times. Alternate between high and low light modes with the press of a button. Once you've selected your preferred light mode, pull out the handle to increase the angle of the beam, then simply push the handle back in when a tighter beam is preferred. Supplied with a wrist strap for the option of hands-free operation.

- 2 Light Modes: High & Low
- Weatherproof: Water & Dust Resistant
- Heavy Duty Construction: Aircraft-Grade Construction



SPECIFICATIONS	ST-3476
Lumens	500
Batteries	3 x AA (not included)
Burn Time	10 hours
Beam Distance	Up to 470 metres
Beam Angle	0-70°
Dimensions	150(L) x 55(Dia.)mm
Weight	273g (including battery)



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
500	ST-3476	\$34.95	\$30.95	\$27.95

### 1000 LUMEN 10W CREE TORCH

Whether you need to find your keys or perhaps light up the international space station, this is a seriously powerful torch. Its all-metal construction provides awesome durability. High / low power and flashing modes to suit your situation.

- Durable aluminium construction
- High, low, flashing modes
- 1000 Lumens!



SPECIFICATIONS	ST-3478
Power	10W
Batteries	6 x AA (Not Included)
Weight	522g (Including Batteries)
Dimensions	220(D) x 50(Dia.)mm



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
1000	ST-3478	\$39.95	\$35.95	\$31.95

### 1000 LUMEN RECHARGEABLE LED TORCH - ADJUSTABLE BEAM

A fully rechargeable tough aluminium alloy torch for your next hunt, or outback journey. Inside is a powerful Cree® XML2-T6 and features a zoom function so targets can be focused on. Modes include high, low, and strobe. Can be recharged with the supplied mains charger.



SPECIFICATIONS	ST-3498
Lumens	1000
LED	Cree® XML2-T6
Lighting Distance	391m
Burn Time	2h
Light Modes	High, low, strobe
Powered By	1 x 26650 Li-ion battery (included)
Dimensions	199(L) x 53(Dia.)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
1000	ST-3498	\$59.95	\$53.95	\$47.90

### 2,500 LUMEN RECHARGEABLE LED TORCH

Super bright 2,500 lumen aluminium alloy torch for camping, caving, hunting, or hiking. Fully rechargeable with the supplied mains charger. Ideal for burning the flesh off vampires and other light sensitive creatures.



SPECIFICATIONS	ST-3499
Lumens	2,500
LED	Cree® XML2-U2
Lighting Distance	400m
Burn Time	1.5- 2hour
Light Modes	High, low, strobe
Powered By	2 x 26650 Li-ion battery (included)
Dimensions	244(L) x 63(Dia.)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
2 500	ST-3499	\$129.00	\$115.95	\$102.95

## LED SPOTLIGHTS

### 600 LUMEN RECHARGEABLE LED SPOTLIGHT WITH ADJUSTABLE BEAM

An LED spotlight that's glove box friendly, but still bright enough to be properly considered a spotlight. With a bright 600 lumens of clean white light it can light up objects up to 500m away when adjusted to the tight spot beam. You can then adjust the beam to a wide, even flood beam when you need to light up a wide area. It is shock and vibration resistant, and of course weatherproof (IP65 rated) so you can use it in the rain. Nice and compact, light in the hand, and lasts for hours. Powered by 3 x 18650 Li-ion batteries, and includes mains and car chargers.



SPECIFICATIONS	ST-3316
Light Output	600 lumens
Beam Distance	Up to 500m
Burn Time	4 hours (high), 24 hours (low)
Battery	3 x 18650 Li-ion 2,200mAh included
Light Modes	high (100%), low (20%)
Dimensions	170(L) x 91(H) x 55(W)mm
Weight	500g



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
600	ST-3316	\$79.95	\$71.95	\$63.95



## SPECIALTY LED LIGHTING

### 350 LUMEN FLOATING SPOTLIGHT - CREE LED

For search and rescue or retrieving the garbage bins from the kerb, it's fully waterproof (IP67) and floats in water. A fold-out stand allows you to put it down, while a pistol-grip and lanyard ensure it stays firmly in-hand too. An integrated whistle in the lanyard can be used to draw attention in emergencies also. High / low power and flashing modes, 3 x AA batteries required.

- 4W CREE LED
- IP67 waterproof and floats
- High, low, and flashing modes



SPECIFICATIONS	ST-3240
Batteries	3 x AA (Not Included)
Range	350m
Weight	400g (Including Batteries)
Dimensions	78(W) x 162(H) x 142(D)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
350	ST-3240	\$19.95	\$17.95	\$15.95

### 700 LUMEN WATERPROOF FLOATING SPOTLIGHT

Designed for taking on the boat, fishing trips, etc. It is fully waterproof and will float if it is knocked into the water. Features a lock switch and swing out bracket for when you need hands-free operation. Includes red-LED strobe function too! The hand strap also includes a whistle for getting attention. Supplied with mains and cigarette lighter charger.



SPECIFICATIONS	ST-3311
Weight	329g
Dimensions	160(H) x 145(D) x 75(Dia.)mm

LUMENS	CAT.	Qty 1+	Qty 5+
700	ST-3311	\$59.95	\$53.95

### 1,500 LUMEN WATERPROOF FLOATING SPOTLIGHT

Designed for taking on the boat. It is fully waterproof and will float if it is knocked into the water. Includes a hand strap that you can tighten so you can't lose it if you find yourself falling overboard. Supplied with mains and cigarette lighter charger.



SPECIFICATIONS	ST-3327
Burn Time	High: 6.5 hours, Low: 14 hours, SOS: 15 hours
Battery	3 x S1P Rechargeable Lithium 18650 Batteries (11.1V 2200mAh)
Weight	820g
Dimensions	200(H) x 190(D) x 120(Dia.)mm



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
1500	ST-3327	\$119.00	\$106.95	\$94.95

## MARINE TORCH & DISTRESS LIGHTS

### SURVIVOR DISTRESS LED LIGHT

A handy safety device that is a must when you are venturing out in open water. Unit is small, lightweight with a lanyard and clip for easy attachment to any life jacket or clothing. The bright LED distress light activates automatically when submerged in water.

- Water activated
- Waterproof construction
- Battery replaceable - battery Life: up to 100 hours



	CAT.	Qty 1+	Qty 5+	Qty 10+
Distress LED Light	ST-3230	\$6.95	\$6.25	\$5.50

### FLOATING LED TORCH

Equipped with 3 ultra bright Osram Oslon LEDs, matched with a special reflector to produce a focused beam capable of lighting up long distances. The base features a fold-out hook for attaching to your bag or hanging in your tent. Both the base and lens end are o-ring sealed allowing the torch to float in water.

- Osram Oslon LEDs
- Requires 2 x D batteries
- Dimensions: 215(L) x 71(Dia.)mm



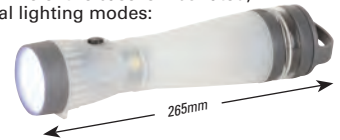
IT FLOATS!

	CAT.	Qty 1+
Floating Torch	ST-3487	\$9.95

### 6 IN 1 SURVIVAL TORCH WITH STORAGE COMPARTMENT

Auto-flashing is triggered when the torch hits water, where it will float too. Includes two built-in compartments to carry some critical medication or other small emergency supplies. The entire case is IP68 rated, so it'll go wherever you will. Several lighting modes:

- torch, lantern, red lantern and red flashing lantern. Drop-resistant to 1m, it's rugged enough to go everywhere you do.
- Auto-flashing emergency mode
- Floats on water
- 4 light modes



SPECIFICATIONS	ST-3133
Light Modes	Torch, Lantern, Red Lantern, Red Flashing Lantern
Light Output	40 lumens (torch), 120 lumens (lantern), 30 lumens (red lantern)
Burn Time	Up to 20 hours
Batteries	3 x AA (not included)
Weight	210g (including alkaline batteries)
Dimensions	265(L) x 60(Dia.)mm



LUMENS	CAT.	Qty 1+	Qty 3+	Qty 6+
120	ST-3133	\$19.95	\$17.95	\$15.95

### 4 IN 1 DYNAMO RADIO (FM/AM) TORCH HAND CRANK EMERGENCY CHARGER

Features a dual-function torch (single 0.5W LED or dual high brightness LEDs), FM radio & siren. All are powered from an internal battery, which can be recharged via USB, or by cranking the dynamo handle. There's a USB charging outlet to provide critical power to your phone in an emergency too. Built-in dynamo will give you over 10-minutes of radio or torch functionality, or two minutes of siren. On a full charge they'll run for much longer.

- Internal Lithium Polymer (LiPo) Battery
- Dynamo Crank Power Backup
- Dual-Function Torch & FM Radio
- Emergency Siren



SPECIFICATIONS	AR-1771
Battery	3.7V 480mAh LiPo
Charge Time	Approx 2 hours
Working Time	0.5W LED: ≥4hrs, LED: ≥10hrs, Radio: ≥5hrs, Siren: ≥70min
Light Output	≥30 lumens (0.5W LED), ≥6 lumens (High Brightness LED)
Emergency Siren Output	≥120dB
Frequency Range	FM 88-108MHz AM 522 - 1620kHz
USB Charging Current	5VDC @ 0.4A Max
Dimensions	158(L) x 50(W) x 33(D)mm, 171g



LUMENS	CAT.	Qty 1+	Qty 4+	Qty 10+
30	AR-1771	\$29.95	\$26.95	\$23.95

### BEANIE WITH RECHARGEABLE LED HEAD LAMP

The powerful 80 lumen LED light features three light modes: low, medium and high. The light can easily be removed for beanie washing, or recharging. Plugs directly into a compatible USB port to recharge. The elasticised knitted beanie fits comfortably and does away with the annoying strap adjustments of other head torches. The ultimate accessory for outdoor adventurers (and people with cold heads).

SPECIFICATIONS	ST-3214
Lumens	80
Light Modes	Low, Medium & High
Battery	400mAh Li-ion
Burn Time	4 hours
Dimensions	65(L) x 50(W) x 14(H)mm (light), 90g



LUMENS	COLOUR	CAT.	Qty 1+	Qty 5+	Qty 10+
80	Black	ST-3214	\$19.95	\$17.95	\$15.95
80	Grey	ST-3215	\$19.95	\$17.95	\$15.95

## LED HEAD TORCHES

### 80 LUMEN LED HEAD TORCH WITH 2 RED LEDS

This multi-function head torch with adjustable head band includes a 3 watt white LED and 2 high brightness red LEDs. The ratchet in the headband tilts the light to where you need it. Use the power button to toggle between four light modes.

- Light Modes: High beam white, low beam white, continuous red, flashing red
- 3W - Requires 3 x AAA batteries
- Dimensions: 60(L) x 45(W) x 35(D)mm



LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
80	ST-3209	\$9.95	\$8.75	\$7.75

### 120 LUMEN ULTRA BRIGHT COB HEAD TORCH

This COB (Chip on board) head torch provides a very bright, wide, and uniform 120 Lumens of light (unlike other LEDs that emit directional light). COB LED technology has increased efficiency and life span when compared to other LED technology. Great for tinkering on the car at night, cooking snags on the campfire, in around the campsite, or just reading a book. Incorporating a comfortable and adjustable elastic strap. Made from shock resistant ABS plastic, this unit is built to last.



SPECIFICATIONS	ST-3211
Light Modes	High and Low
Batteries	3 x AAA required
Dimensions	57(W) x 44(D) x 40(H)mm
Weight	67g with batteries

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
120	ST-3211	\$12.95	\$11.65	\$10.35

### 180 LUMEN HEAD TORCH WITH RED LEDS - RECHARGEABLE

This unique head torch features a high power 3W white LED as well as two ultra-bright red LEDs. They can be set independently for different modes. Select from high/low/flashing mode for the white LED, and constant/flashing modes for the red LEDs. The hinged bracket allows angle adjustment to optimise the light where you need it.

- Weatherproof IPX4
- Dual Switch Control
- Rechargeable



SPECIFICATIONS	ST-3277
Burn Time	4 hours High / 30 hours Low
Charge Time	6 hours
Weight	55g (excluding head strap)
Dimensions	55(L) x 35(W) x 35(D)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
180	ST-3277	\$19.95	\$17.95	\$15.95

### 260 LUMEN ADJUSTABLE HEAD TORCH WITH CREE® LED

Three modes of operation - high, low and strobe. The beam can be focused quickly from wide to spot by simply sliding the zoom in or out. Comfortable elasticised head strap.



SPECIFICATIONS	ST-3213
Burn Time	7 hours
Light Modes	High, low, strobe
Water Resistant	Yes
Batteries	3 x AAA (not included)
Dimensions	65(D) x 60(W) x 40(H)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
260	ST-3213	\$19.95	\$17.95	\$15.95

### 250 LUMEN LED HEAD TORCH WITH RED & GREEN LEDS

Designed with two distinct light sources to suit different uses. The first is a powerful Cree® LED for long range / torch style illumination when hiking or searching etc. The large COB LED can then be operated in white, red or green modes. This provides you a broad flood-style light which is perfect for more general illumination. Red and green modes are especially useful in adverse conditions. All bundled into a shock-resistant case for durability. A small red light and whistle is also included on the head-strap as an additional emergency feature.



SPECIFICATIONS	ST-3210
Batteries	3 x AAA required
Burn Time	16 Hours
Ingress Rating	IP44
Dimensions	67(W) x 46(H) x 35(D)mm (Excluding Strap)

LUMENS	CAT.	Qty 1+	Qty 6+	Qty 12+
250	ST-3210	\$19.95	\$17.95	\$15.95

### 550 LUMEN HEAD TORCHES - ADJUSTABLE BEAM & CREE® XML LED

Will output 550 lumens of bright white light which is more than enough for all of the above and more. The headstrap is adjustable and the light beam can be adjusted to suit your needs. To operate simply press the push switch on the battery pack mounted on the back of the head strap. Dimensions: 80(W) x 70(H) x 55(D)mm. ST-3299 includes charger and mains power supply.



SPECIFICATIONS	ST-3298	ST-3299
Battery	Requires 4 x AA batteries	18650 Li-ion Rechargeable
Recharge Time	-	4 hours
Burn time	4 - 5 hours	4 - 5 hours
Light Modes	High, dim, flashing	High, dim, flashing

LUMENS		CAT.	Qty 1+	Qty 10+	Qty 25+
550	Takes 4 x AA Batteries	ST-3298	\$29.95	\$26.95	\$23.70
550	Rechargeable	ST-3299	\$49.95	\$44.90	\$39.90

## Select Your Model: LED Head Torch



	ST-3209	ST-3211	ST-3277	ST-3213	ST-3210	ST-3298	ST-3299
Lumens	80	120	180	260	250	550	550
Run Time (hour)	5	4	4	7	16	4	4
Power	3 x AAA	3 x AAA	Li-Po	3 x AAA	3 x AAA	4 x AA	Lithium
Rechargeable			•	•		•	•
Adjustable Beam						•	•
L x W x D (mm)	60 x 45 x 35	57 x 40 x 44	55 x 35 x 35	60 x 40 x 65	67 x 46 x 35	80 x 70 x 55	80 x 70 x 55

## LANTERNS

### 30 LUMEN CAMP LIGHT WITH CARABINER

A handy LED light in the shape of a traditional light bulb perfect for ambient light in your tent, kids cubbyhouse or cabin. Hang using the integrated D-hook or supplied carabiner.



SPECIFICATIONS	ST-3158
3 Light Modes	High, low, flashing
Requires	1 x AA battery
Dimensions	100(L) x 60(Dia.)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
30	ST-3158	\$6.95	\$6.25	\$5.55

### MINI COLLAPSIBLE LANTERN 180 LUMENS

Ultra compact yet ultra bright. This mini lantern is super compact for storage, but expands out to reveal an ultra bright LED light. Integrated carry / hanging handles mean you can hang it up easily, and provides 360° light. Includes 3 x AAA batteries, so it's ready to go (but don't forget extra batteries if you anticipate a lot of use)! Available in red, orange, blue and grey finishes.

*NOTE: Online purchase will receive a random colour. Sold as single unit.*

- Carry handles
- Uses 3 x AAA batteries (included)
- 4 hours burn time



SPECIFICATIONS	ST-3145
Batteries	3 x AAA (Included)
Lumens	180
LED	3 x COB
Range	8m
Angle	360°
Burn Time	4 Hours
Weight	160g (Including Batteries)
Dimensions	95(H) x 70(Dia.)mm (Closed) 140(H) x 70(Dia.)mm (Open)

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10
180	ST-3145	\$12.95	\$11.45	\$9.95

### 300 LUMEN COLLAPSIBLE LANTERN WITH MAGNETIC BASE

Ultra-convenient and clever design allows the lantern to collapse down when not in use. Pop it up and switch it on, and the three ultra-bright COB LEDs provide stunning brightness. The lantern is designed with a metal hanging handle, as well as magnets in the base to hold on any ferrous metal such as a car, steel pole, etc.



SPECIFICATIONS	ST-3130
Batteries	3 x AA required
Weight	290g
Dimensions	Closed: 128(H) x 85(Dia.)mm Open: 185(H) x 85(Dia.)mm

LUMENS	CAT.	Qty 1+	Qty 6+	Qty 12+
300	ST-3130	\$14.95	\$13.45	\$11.95

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.

### 280 LUMEN LANTERN WITH RED LED FLASHER

Featuring three ultra-powerful COB LEDs for an ultrabright 280 lumen output, to light up your campsite. It also incorporates 6 x red flashing LEDs into the top, for use in an emergency. High / low brightness selection. Also features a metal hang-hook which is very handy. Requires 3 x AA batteries.

- 3 COB LEDs
- Handy Hang-hook



SPECIFICATIONS	ST-3426
Batteries	3 x AA
Dimensions	160(H) x 80(Dia.)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
280	ST-3426	\$14.95	\$13.45	\$11.95

### 500 LUMEN LED CLASSIC LANTERN

Lasts up to 10 days on low setting, or up to 3 days set to its super bright 500 lumen cool white setting. It is made from impact-resistant ABS plastic and drop tested to 1m, and will survive a rain shower with its IPX4 weatherproof rating. The top rim of the lantern glows-in-the-dark, so you can still find your way about the tent or room after you turn it off.



SPECIFICATIONS	ST-3420
Lumens	500
4 Light Modes	High, medium, low, flashing
Requires	6 x AA alkaline batteries
Dimensions	150(L) x 60(Dia.)mm

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
500	ST-3420	\$34.95	\$31.45	\$27.95

### FLEXIBLE USB LED STRIP LIGHT WITH MOUNTS AND CARRY BAG

USB lights used to be the domain of gamers and computing enthusiasts. With the proliferation of USB power in portable power devices (power banks, mains inverters etc), USB power is often more available than mains or 12V power. This waterproof flexible LED strip light connects into any USB port to power its 120 LEDs. Use it as a strip light, or keep it in the included nylon bag and it will behave more like a lantern! It includes magnetic sliders and reusable cable ties for absolute convenience. Lightweight and handy, perfectly suited for camping as well as a backup emergency kit.

- IP67 Waterproof
- 120 x LEDs
- USB Powered



SPECIFICATIONS	ST-3952
Light Output	180 Lumens
Power	5VDC @ 1.55A USB Connection
Length	2m

LUMENS	CAT.	Qty 1+	Qty 3+	Qty 6+
180	ST-3952	\$29.95	\$26.95	\$23.95

### FLEXIBLE LED STRIP LIGHT FOR OUTDOORS

A simple solution for campsite lighting. Just plug it into a 12V cigarette lighter socket, flick the switch and you have over 1,000 lumens of brilliant white light to light up under your awning, inside a tent, or anywhere else around the campsite. The 1.2m long LED strip is fitted inside a fabric strip with hook and loop backing allowing you to easily attach it to tent poles or awning frames. Metal hooks are also fitted for alternative mounting options. The supply cord is 5m long with a waterproof in-line LED switch. The LED strip is IP67 water resistant - so there's no worries if you leave it out in the pouring rain. Includes carry bag.



SPECIFICATIONS	ST-3954
Water Resistant Rating	IP67
Input	12VDC @ 1A
LEDs	72 x 5050SMD
Dimensions	1350(L) x 50(W) x 7(H)mm
Cord Length	5m

LUMENS	CAT.	Qty 1+	Qty 5+	Qty 10+
1200	ST-3954	\$49.95	\$44.95	\$39.95



## EXTERNAL LIGHTS & SPOTLIGHTS

### 720 LUMEN LED FLOODLIGHTS WITH CREE® LED

A cost effective waterproof, dustproof and shockproof lights suited to the rough demands of 4WD or marine lighting applications. The low profile design and provided mounting clips allow you to make a group of these lights mounted as a straight light bar or stacked on each other to create a light panel. For off-road use only.

- Housing: Durable alloy diecast



STACKABLE

SPECIFICATIONS	SL-3938
LED Life	Over 50,000 hours
Waterproof	IP67
Current draw	12V (0.6A), 24V (0.3A)
Voltage	9 - 60V (10W)
Lumens	720
Colour Temperature	6000K
Termination	Fly Leads
Dimensions	51(W) x 51(H) x 61(D)mm

TYPE		CAT.	Qty 1+	Qty 3+	Qty 6+
Floodlight	Pair	SL-3938	\$89.95	\$80.95	\$71.95

### 1,136 LUMEN LED VEHICLE FLOODLIGHT

Compact but powerful, it uses eight 1.5W Osram® LEDs to throw a huge, wide beam in front of you. A broad 50° angle gives you plenty of light spread, while still retaining up to 57m illumination range. Powered from 12-24VDC so they're suitable for trucks too, they're built tough. Protected against shock, water, and UV shielded, their powdercoated aluminium frame and stainless steel mounting hardware will go anywhere you do.



SPECIFICATIONS	SL-3931
Input	9-36VDC @ 12W
Lumens	1,136
Ingress Rating	IP68
Dimensions	128(W) x 51(D) x 90(H)mm (Excluding Cable)

TYPE		CAT.	Qty 1+	Qty 6+	Qty 12+
Floodlight	Each	SL-3931	\$39.95	\$35.95	\$31.95

### 2,272 LUMEN LED VEHICLE FLOODLIGHTS

These are stunningly bright floodlights, with a massive 2,272 lumen output. Available in a round or square aluminium enclosure to suit your personal style, both styles encase the same LED array and produce the same light power. Built with 16 individual 1.5W Osram® LEDs for huge light output, they're shockproof, weatherproof, and UV shielded. Powered from 9-36VDC so they'll run on cars or trucks. Fitted with stainless steel mounting hardware.



SL-3935

SL-3937

SPECIFICATIONS	SL-3935	SL-3937
Input	9-36VDC @ 24W	9-36VDC @ 24W
Lumens	2,272	2,272
Ingress Rating	IP68	IP68
Dimensions	128(W) x 51(D) x 142(H)mm	128(W) x 51(D) x 152(H)mm

TYPE		CAT.	Qty 1+	Qty 6+	Qty 12+
Square	Each	SL-3935	\$59.95	\$53.95	\$47.95
Round	Each	SL-3937	\$59.95	\$53.95	\$47.95

### 1,733 LUMEN COMPACT LED FLOODLIGHT WITH DEEP OPTIC REFLECTOR

Super tough and compact LED spot/floodlights which can be bolted onto your 4WD, boat, car, off-road buggy or even for security use. Features a die cast aluminium alloy heatsink housing with an unbreakable polycarbonate front cover. Thanks to the deep optic reflector lens, the beam length on these lights is incredible for the lumen output. Inside is a single next-generation 25W Cree MT-G LED, driven by high end PWM driver circuitry that protects the LED from over temperature and extends the operating life. Includes reverse polarity protection in case you make a junior error when wiring up! For off-road use only.

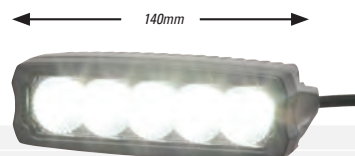


SPECIFICATIONS	SL-3932
Beam Pattern	Flood
Beam Distance	Flood (178m)
Lumen Output	1733
Equivalent Halogen Lamp	200W
Operating Voltage	9-36VDC
Input Current:	2.0A (12VDC), 1.1A (24VDC)
Operating Temperature	-40°C to +60°C
Dimensions	86(W) x 100(H) x 93(D)mm

TYPE		CAT.	Qty 1+	Qty 2+
Floodlight	Each	SL-3932	\$69.00	\$49.00

### 2,250 LUMEN 25W SINGLE ROW LED VEHICLE WORKLIGHT

Just hook it up to your 12V or 24V battery system and light up your work area, campsite, boat deck or any other outdoor area. This single row LED work light features 5 x high power Epistar 5W LEDs housed in an IP67 rated powder coated aluminium heatsink case, covered with an unbreakable Lexan polycarbonate lens. Being LEDs, they use very little power to produce ample light, and are impervious to shock and vibrations - excellent in 4WD, marine, caravan, mining, or any other harsh environment application. For off-road use only.



SPECIFICATIONS	SL-3975
Beam Pattern	Flood
Beam Distance	92m
Lumen Output	2,250
Equivalent Halogen	175W
Input Current	1.56A (12VDC), 0.80A (24VDC)
Operating Temp	-40°C - 60°C
Dimensions	140(L) x 45(H) x 71(D)mm

TYPE		CAT.	Qty 1+	Qty 5+	Qty 10+
Flood	Each	SL-3975	\$79.95	\$71.95	\$63.95

### SPOTLIGHT COVERS

Keep your LED spotlights covered and protected when not in use or change the light to blue or amber for various driving and weather conducting fog. Pack includes one each of:

- Clear blue
- Clear amber
- Solid white



Because the LED lamps run cooler, you can run the lights with the covers on. Great for foggy/misty conditions. (A quartz lamp would melt the cover!)

TYPE	CAT.	Qty 1+	Qty 2+	Qty 6+
4.5" White Spotlight Cover	SL-3963	\$10.95	\$9.85	\$8.75
6.5" White Spotlight Cover	SL-3965	\$12.95	\$11.35	\$10.35
8" White Spotlight Cover	SL-3967	\$9.95		
To suit SL-3918 & SL-3919	SL-3917	\$14.95		
To suit SL-3920, SL-3921 & SL-3922	SL-3923	\$19.95		

## LIGHTING ACCESSORIES

### UNIVERSAL BULLBAR MOUNTING BRACKETS

SL-3929

These brackets are designed to mount driving lights, spotlights, UHF antenna's and other various applications to a tube frame (such as a bull-bar). Allows for much easier attachment to bull-bars, trailer railing, ute roll-bars or even a roof rack. Stainless steel construction with shockproof rubber insulation so your tube frame isn't scratched or dented. Ideal for use with our range of 12VDC LED lights SL-3914, SL-3912, SL-3916, SL-3918, SL-3920 and SL-3922. 3 sizes available to fit various diameter frames:

DIAMETER		CAT.	Qty 1+	Qty 2+	Qty 6+
25-38mm	Bullbar Mount	SL-3925	\$14.95	\$13.35	\$11.70
40-52mm	Bullbar Mount	SL-3927	\$14.95	\$13.35	\$11.70
70-80mm	Bullbar Mount	SL-3929	\$19.95	\$17.70	\$15.70



## Tech Talk: How To Wire Up Driving Lights

Fitting spotlights or driving lights to your 4WD, ute or other vehicle is generally pretty simple when you use a relay wiring kit like our SY-4081 below, but it pays to wire it correctly to avoid any hassles with the law. Most states follow the requirements of the Australian Design Rules (ADRs), which requires that they be wired so that they only operate in conjunction with the head light circuit and are fitted with an independent ON/OFF switch - however some states require them to only operate in conjunction with the HIGH beam circuit and with an independent switch. Check with your local transport authorities for rules in your area.

### 12VDC 30A RELAY WIRING KITS

Taking a shortcut might be fine when you're driving through the bush. But don't do it with your electrical wiring. These relay kits take the hassle out of figuring out relay wiring, to provide a safe and easy method to install any high current device. That might be a fridge, driving lights, awning lights, or anything else. By wiring through a relay, you're not feeding all the power through your switch mechanism, which keeps the high current cabling to a minimum. They're easy to install and will save you time. Two models available. Each kit includes a 2m wiring loom, 30A relay, a contura style switch, and one or two high current outputs.

SPECIFICATIONS	BOTH
Rated Voltage	12VDC
Maximum Current	30A @ 12VDC
Cable Length	2m

	WIRING	CAT.	Qty 1+	Qty 10+	Qty 25+
30A	Single	SY-4081	\$39.95	\$35.95	\$31.95
30A	Dual	SY-4184	\$49.95	\$44.95	\$39.95



### 12V 60A WIRELESS LIGHTING CONTROLLER

This extremely useful lighting controller gives you wireless control over your light bars, driving lights, caravan lights and any other 12V powered device. 8 output channels over two zones provides the ability to switch lights on and off at the touch of a button. The two main (green and blue) zones each have 4 outputs for up to 20, 5, 3.5, and 1.5A output respectively. Total power load is up to 60A (that's a lot of light bars!). The controller is fused for safety, so you can connect it straight to your vehicle battery, and your light bars to the controller - simple! Lights are quickly connected into the screw-down terminals, and the control box has mounting tabs for secure mounting in your vehicle.

SPECIFICATIONS	MS-6210
Max Power Output	12VDC @ 60A
Rated Input Voltage	12VDC
Working Voltage	11-15VDC Input
Low Voltage Protection	9.5VDC +/- 0.3VDC
Remote Control Battery	12V A23 Alkaline (included)
Wireless Frequency	433MHz
Dimensions	135(W) x 132(D) x 35(H)mm (Excluding Cables)



	CAT.	Qty 1+	Qty 5+	Qty 10+
8 Channel	MS-6210	\$99.95	\$89.98	\$79.95

## CAR LIGHTING - EXTERIOR

**Warning:** State roads & traffic authorities prohibit the retrofitting of these products to cars with normal headlights. To be used only for off-road and showroom vehicles when replacing quartz halogen bulbs, or as headlight replacements for HID factory-fitted new model vehicles

### SLIM BALLAST XENON HID LIGHT KITS

HID provides far greater light output than standard automotive lights. At night, road signs, pedestrians, and general road hazards will receive much better illumination so you can drive with more confidence. This series of kits all feature a slim ballast design for ease of installation in engine bays and tight spaces.

- Ballast dimensions: 85(L) x 61(W) x 15(H)mm
- Lifespan: >2500 hours
- 300% more light than halogen
- HID 92 Lumens per watt compared to 18 Lumens per watt for a halogen

H1 Slim Ballast HID Kit 12V 6000K SL-3490

H4 Slim Ballast HID High/Low Kit 12V 6000K SL-3495

H7 Slim Ballast HID Kit 12V 6000K SL-3496

Note: Please ensure your lights are angled correctly These lights are not ADR approved.



Only with SL-3495



1 YEAR WARRANTY

VOLTAGE	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
12V	H1	SL-3490	\$59.95	\$53.95	\$47.95
12V	H4 High + Low	SL-3495	\$84.95	\$76.45	\$67.95
12V	H7	SL-3496	\$59.95	\$53.95	\$47.90

### H4 HID SINGLE BEAM BULB - 35W

Drop-in replacement H4 HID bulb.

- Power: 35W
- Lumination: 2500 - 3,500 Lumens
- Lifespan: 3000 hours
- Colour Temperature: 3000 - 6000K
- Voltage 7: 0 - 100V



VOLTAGE	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
12V	H4	SL-3412	\$14.95	\$13.35	\$11.70

### REPLACEMENT BULB

Used in the latest model luxury and high performance cars, High Intensity Discharge (HID) vehicle headlights are far brighter, whiter and more efficient than their quartz halogen predecessors. This HID dual lamp conversion kit is suitable for H4 bases and incorporate the latest in German engineering.

- 35W HID Xenon lamps
- 6000K colour temperature comparable to sunlight
- Extra bright 3200 lumens



1 YEAR WARRANTY

	CAT.	Qty 1+
Replacement High/Low HID Bulb	SL-3414	\$14.95

### HEADLAMP KITS WITH LUXEON Z ES LEDS

Bright vehicle headlamps with advanced LUXEON Z ES LEDs. Each light comes in an alloy bodied case and connects via the supplied ballasts. The kit contains 2 x LED modules, 2 x controller assemblies, and all the wiring is pre-terminated to appropriate connectors to make installation as quick and easy as possible. 3,000 lumens for 40W (H4) of power light output. These modules will last up to 10,000 hours and are very efficient.

- Accurate LED position to ensure correct beam pattern
- More spot without glare
- Plug and play
- High intensity

LUXEON Z ES LEDS

SPECIFICATIONS	SL-3524
LED Type	2 x LUXEON Z ES
Colour Temperature	5,500K
Lumens	3,800
Operation Mode	High and Low
Power	40W
Input Voltage	8VDC - 48VDC
Lifetime	10,000 hours
Dimensions	84(L) x 42(W)mm



1 YEAR WARRANTY

VOLTAGE	TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
12/24V	H4 High + Low	SL-3524	\$169.00	\$151.95	\$134.95

## CAR LIGHTING - INTERIOR

### T5 & T10 REPLACEMENT LED GLOBES - 12VDC

Replace or jazz up your automotive dashboard or indicator lighting with LEDs! Not only will they spruce up the look of your car, they are also long life with low current consumption and total reliability.

• T5 & T10 sizes to suit most applications



				CAT.	Qty 1+	Qty 2+	Qty 4+
T5	Wedge	LED Globe	White	ZD-0380	\$1.95	\$1.75	\$1.40
T5	Wedge	LED Globe	Red	ZD-0381	\$1.95	\$1.75	\$1.40
T5	Wedge	LED Globe	Blue	ZD-0382	\$1.95	\$1.75	\$1.40
T5	B8.5D	LED Globe	White	ZD-0384	\$2.50	\$2.21	\$1.80
T5	B8.5D	LED Globe	Red	ZD-0385	\$2.50	\$2.21	\$1.80
T5	B8.5D	LED Globe	Blue	ZD-0386	\$2.50	\$2.21	\$1.80
T10	Wedge	LED Globe	White	ZD-0390	\$1.95	\$1.75	\$1.40
T10	Wedge	LED Globe	Red	ZD-0391	\$1.95	\$1.75	\$1.40
T10	Wedge	LED Globe	Blue	ZD-0392	\$1.95	\$1.75	\$1.40
T10	Wedge	LED Globe	Quad White	ZD-0394	\$3.50	\$3.15	\$2.85
T10	Wedge	LED Globe	Quad Red	ZD-0395	\$3.50	\$3.15	\$2.85
T10	Wedge	LED Globe	Quad Blue	ZD-0396	\$3.50	\$3.15	\$2.85

### LED T10 3D WEDGE GLOBE

Many cars are now employing an electronic control system called CANBus, which can be a problem when using LED replacement globes as the system will give a globe failure indication. Being CANBus compatible, these LED globes don't cause these failure indications. Each globe features a special "3D" type of LED lamp, which provides an extremely even, wide light output that is very similar to a normal globe in style and appearance. This makes them a perfect replacement for interior lights, and automotive lamps where the light fitting has a lot of "clear" elements making other LED globes unattractive to look at. Powered by 12VDC, and suitable for off-road use only.

CAT.	Qty 1+	Qty 4+	Qty 10+
ZD-0760	\$14.95	\$13.45	\$11.95

### SOCKET FOR T10 WEDGE GLOBE

Socket to suit T10 wedge globes.

- Pre-wired with 15cm red and black wires
- Rubber base allows easy press fitting



CAT.	Qty 1+	Qty 10+	Qty 50+
SL-2661	\$3.95	\$3.55	\$3.15

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### LED REPLACEMENT GLOBES WITH 6 X 5730SMD LEDs

This range of common automotive and general use LED globes are also compatible with modern CANbus systems, so that they don't give globe failure warnings when you fit them to your modern vehicle. Each globe is powered by 12VDC, is fitted with six high brightness 5730SMD type LEDs, and have a non-polarity circuit so you don't have to worry about fitting them the right way around. There are three models to choose from:

- 150 Lumens



CAT NO.	BASE	LED TYPE	BEAM	COLOUR	DIMENSIONS
ZD-0732	E10 screw	6x5730SMD	360°	White	28(H) x 12(Dia)mm
ZD-0734	BA9S bayonet	6x5730SMD	360°	White	28(H) x 12(Dia)mm

TYPE	CAT.	Qty 1+	Qty 4+	Qty 10+
E10 Screw	ZD-0732	\$14.95	\$13.45	\$11.95
BA9S Bayonet	ZD-0734	\$14.95	\$13.45	\$11.95

### LED BA9S 3D GLOBE

Many cars are now employing an electronic control system called CANBus, which can be a problem when using LED replacement globes as the system will give a globe failure indication. Being CANBus compatible, these LED globes don't cause these failure indications. Each globe features a special "3D" type of LED lamp, which provides an extremely even, wide light output that is very similar to a normal globe in style and appearance. This makes them a perfect replacement for interior lights, and automotive lamps where the light fitting has a lot of "clear" elements making other LED globes unattractive to look at. Powered by 12VDC, and suitable for off-road use only.



CAT.	Qty 1+	Qty 4+	Qty 10+
ZD-0762	\$14.95	\$13.45	\$11.95

## CANBUS COMPATIBLE GLOBES

### LED FESTOON REPLACEMENT GLOBES, CANBUS COMPATIBLE

A range of ultra-bright LED replacement "festoon" globes for car interior lights, which are fully compatible with modern "CANBus" systems that would otherwise give a globe failure warning when using an LED globe. Each globe features six ultra bright wide angle SMD LEDs, a non-polarity circuit (can fit the globe either way), and a CANBus circuit. There are three models to choose from, each working on 12VDC.



CAT NO.	SIZE	LUMENS	LED TYPE	BEAM	COLOUR
ZD-0750	31mm	150	6x5730SMD	120°	White
ZD-0752	36mm	150	6x5730SMD	120°	White
ZD-0754	41mm	150	6x5730SMD	120°	White

SIZE	CAT.	Qty 1+	Qty 4+	Qty 10+
31mm	ZD-0750	\$12.95	\$11.35	\$10.35
36mm	ZD-0752	\$12.95	\$11.35	\$10.35
41mm	ZD-0754	\$12.95	\$11.35	\$10.35

### LED FESTOON 3D GLOBE

Many cars are now employing an electronic control system called CANBus, which can be a problem when using LED replacement globes as the system will give a globe failure indication. Being CANBus compatible, these LED globes don't cause these failure indications. Each globe features a special "3D" type of LED lamp, which provides an extremely even, wide light output that is very similar to a normal globe in style and appearance. This makes them a perfect replacement for interior lights, and automotive lamps where the light fitting has a lot of "clear" elements making other LED globes unattractive to look at. Powered by 12VDC, and suitable for off-road use only.



CAT.	Qty 1+	Qty 4+	Qty 10+
ZD-0764	\$19.95	\$17.95	\$15.95
ZD-0766	\$19.95	\$17.95	\$15.95
ZD-0768	\$19.95	\$17.95	\$15.95



## ✓ CANBUS COMPATIBLE GLOBES

### CANBUS COMPATIBLE AUTOMOTIVE BA15 TYPE LED REPLACEMENT GLOBES

More and more modern vehicles are employing an electronic control system called CANBus, which has many benefits including monitoring of globe failures. This can pose a bit of a problem with LED replacement globes causing the CANBus to detect that globe as having failed. This range of BA15 type LED globes are all CANBus compatible (won't give errors), with universal polarity, very low power consumption and a high lumen output. For off-road use only.

- Powered by 12VDC, can be used as tail/brake light (BAY15D), parker light (BA15S), or even as interior light globes (BA15D/BA15S) thanks to their high brightness
- The BA15D is very commonly used in caravan and marine interior lights

Three types available

CAT NO.	BASE	LUMENS	LED TYPE	BEAM	COLOUR	DIMENSIONS
ZD-0740	BAY15D	525	21 x 5730SMD	360°	White	50(H) x 18(Dia.)mm
ZD-0742	BA15D	525	21 x 5730SMD	360°	White	50(H) x 18(Dia.)mm
ZD-0744	BA15S	525	21 x 5730SMD	360°	White	50(H) x 18(Dia.)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Stop/Tail Lamp CANBus	ZD-0740	\$19.95	\$17.95	\$15.70
Interior/Navigation Lamp CANBus	ZD-0742	\$19.95	\$17.95	\$15.70
Interior/Park/Reverse Lamp CANBus	ZD-0744	\$19.95	\$17.95	\$15.70



### 360° "3D" BA15 TYPE LED AUTOMOTIVE REPLACEMENT GLOBES, CANBUS COMPATIBLE

Many cars are now employing an electronic control system called CANBus, which can be a problem when using LED replacement globes as the system will give a globe failure indication. Being CANBus compatible, these LED globes don't cause these failure indications. Each globe features a special "3D" type of LED lamp, which provides an extremely even, wide light output that is very similar to a normal globe in style and appearance. This makes them a perfect replacement for interior lights, and automotive lamps where the light fitting has a lot of "clear" elements making other LED globes unattractive to look at. Powered by 12VDC, and suitable for off-road use only. Three models available:

CAT NO.	BASE	LUMENS	LED TYPE	BEAM	COLOUR	DIMENSIONS
ZD-0746	BAY15D	300	"3D" LED	360°	White	50(H) x 18(Dia.)mm
ZD-0748	BA15D	300	"3D" LED	360°	White	50(H) x 18(Dia.)mm
ZD-0749	BA15S	300	"3D" LED	360°	White	50(H) x 18(Dia.)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Stop/Tail	ZD-0746	\$34.95	\$31.45	\$27.95
Interior/Navigation	ZD-0748	\$34.95	\$31.45	\$27.95
Interior/Park/Reverse	ZD-0749	\$34.95	\$31.45	\$27.95



### REVERSING LED LIGHT GLOBE WITH BEEPER

Replacement LED reversing light with built-in warning buzzer to warn pedestrians that you are reversing. Great for large caravans, trucks and buses. Suits vehicles with P21W BA15S reverse light bulbs.

- 9 Super Bright White LEDs
- Brightness: >6000 lux
- Input voltage: 12VDC
- Current: <400mA
- Max SPL: 115dBs



	CAT.	Qty 1+	Qty 4+	Qty 10+
	ZD-0519	\$9.95	\$8.75	\$7.75

## Tech Talk: Automotive Globes

You may look at our range of LED automotive globes and wonder what all these different globe numbers mean: BA15S, T10, E10, BAY15D, etc.

Well luckily these numbers are an industry standard, and actually describe the type and size of the globe's base and pin arrangements.

Below is a list of the most common types of automotive globes, and a typical application for them:

- T5** 5mm wedge style base. Used in dashboard illumination
- T10** 10mm wedge style base. Used in dashboards, park light, number plate illumination, etc
- T20** 20mm wedge style base. Used in some indicators, tail and brake lights
- E10** 10mm Edison screw base. Used in some dashboards, park lights and number plate illumination (typically on older vehicles)
- BA9S** 9mm Bayonet cap base with single contact pin. Used in dashboards, park lights and various lights
- BA15S** 15mm Bayonet cap with single contact pin. Used in indicators, tail, parker and some brake lights
- BA15D** 15mm Bayonet cap with two contact pins. Used in caravan interior lights and marine navigation lights
- BAY15D** 15mm Bayonet cap with offset side location tabs, with two contact pins on the base. Used for tail/stop lights (high/low brightness)

## ✓ CAR LIGHTING KITS

### UNIVERSAL T10/211/BA9S LED RETROFIT KITS

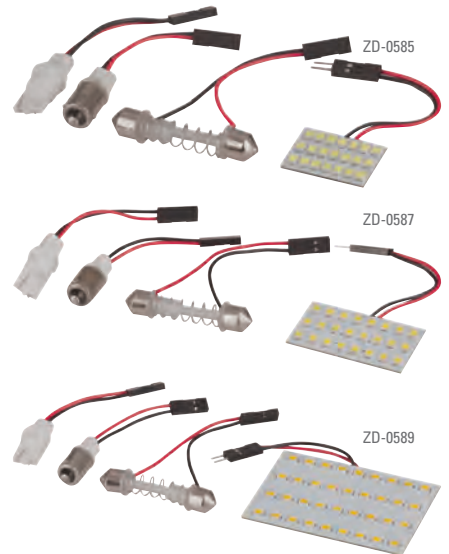
Fantastic little kits to upgrade your car/caravan/boats interior lighting with LED technology. Each kits consists of an array of LEDs on a board with 3M adhesive foam backing, making it easy to retrofit into almost any existing light. There are 3 bases which can connect to T10, 211, or BA9S sockets. The base is then connected to the SMD LED array, couldn't be easier! The LEDs will give greater lifespan and brighter light in many cases.

Three kits available:

21 X SMD LEDs - ZD-0585

24 X SMD LEDs - ZD-0587

36 X SMD LEDs - ZD-0589



SPECIFICATIONS	ZD-0585	ZD-0587	ZD-0589
Power	2.5W, 12VDC	3W, 12VDC	4.5W, 12VDC
Lumens	260	310	450
LED Type	2835 SMD	2835 SMD	2835 SMD
LED Count	21	24	36
LED Colour	Cool white	Cool white	Cool white
Dimensions	25(L) x 20(W)mm	45(L) x 25(W)mm	60(L) x 40(W)mm

LUMENS	POWER	CAT.	Qty 1+	Qty 2+	Qty 4+
260	2.5W	ZD-0585	\$9.95	\$8.75	\$7.75
310	3W	ZD-0587	\$12.95	\$11.35	\$10.35
450	4.5W	ZD-0589	\$14.95	\$13.45	\$11.95



Shop online for your Jaycar Electronics products and check out our latest products and promotions on our website.

Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)

## ✓ CAR LIGHTING - TRAILER LIGHTS

### 12V LED TRAILER LIGHTS (STOP/TURN/TAIL)

Regular bulb failures in your trailer lights are not only a pain in the posterior, but also quite dangerous to your fellow road users. Switching to LED alternatives solves this problem completely, since LEDs are not at all affected by shock and vibration, last over 50,000 hours, use a fraction of the power, and are actually more visible to other road users. These trailer lights are an "all-in-one" solution measuring only 100mm wide by 90mm high, and providing all the legal illumination needs of a caravan, boat trailer, camping trailer etc., being; Stop, Tail, Turn and number plate illumination. They appear to be quite water resistant but we cannot quote an IP rating for water and dust. Also has a red reflector panel.

- Screw stud mount.
- Dimensions: 100(W) x 90(H)mm



### 12V LED TRAILER LIGHT KIT WITH WIRING

Regular bulb failures in your trailer lights are not only annoying to replace, but also quite dangerous. LED alternatives solves this problem completely, since LEDs are not at all affected by shock and vibration, last over 50,000 hours, use a fraction of the power, and are actually more visible to other road users. These trailer lights are an "all-in-one" solution measuring only 100mm wide by 90mm high, and providing all the legal illumination needs of a caravan, boat trailer, camping trailer etc., being; Stop, Tail, Turn and number plate illumination, along with a red reflector panel. The housing is submersible which is perfect for boat trailers, and each light is fitted with a connector to make wiring easier. The kit includes 2x trailer lights, a pre-made 7m trailer cable with 7 pin flat trailer connector.

- Sold as a pair.
- ADR Approved
- Screw stud mount.
- 7m pre-made trailer cable included
- Dimensions: 100(W) x 90(H)mm (each)



	CAT.	Qty 1+	Qty 2+	Qty 4+
Pair	ZD-0720	\$39.95	\$35.90	\$31.90

	CAT.	Qty 1+	Qty 2+	Qty 4+
Pair with Wiring	ZD-0722	\$69.95	\$62.95	\$55.95

## ✓ TRAILER WIRING ACCESSORIES

Before 1988, the only trailer connector in common use was a 6 pin unit (There were some 5 pin plug/sockets found in Victoria, TAS, SA & NT). Since 1988 you must have a 7 pin (minimum) connector in order to register your boat, camper trailer etc. (You may need a bigger connector in some cases, so consult an auto electrician for this) in both Australia & New Zealand. You can, however, in the case of small box trailers use 5 core wire. See below.

### RE-WIREABLE TRAILER CONNECTORS - 7 PIN

A range of the most common 7 pin trailer plugs and sockets, featuring easy to use screw down terminals, corrosion resistant metal contacts and high quality UV stabilised plastics. In each type, the socket is fitted to the vehicle, and the plug is fitted to the trailer.

- All trailer plugs and adaptors are made from the highest quality material.



	CAT.	Qty 1+	Qty 10+	Qty 50+
7 Pin Flat Plug	PP-2050	\$7.95	\$6.95	\$6.25
7 Pin Flat Socket	PS-2051	\$7.95	\$6.95	\$6.25
7 Pin Large Round Plug	PP-2052	\$7.95	\$6.95	\$6.25
7 Pin Large Round Socket	PS-2053	\$7.95	\$6.95	\$6.25
7 Pin Small Round Plug	PP-2054	\$7.95	\$6.95	\$6.25
7 Pin Small Round Socket	PS-2056	\$7.95	\$6.95	\$6.25



### TRAILER CONNECTORS

There are now three types of trailer connectors - each with its own wiring configuration. See our website for full details of pin connectors and colours...

### TRAILER PLUG ADAPTOR LEADS - 7 PIN

Often we find that the trailer we've borrowed from a mate does not plug into the socket on your vehicle, and that's where these trailer plug adaptor leads come in handy. About 300mm in length, and 6 versions available to fix up any mismatch of the 7 Pin Flat, 7 Pin Large round and 7 Pin Small round trailer connectors. Remember, match the plug end of the adaptor to the socket on your car, and the socket end of these adaptors to the plug end on your trailer.

- All trailer plugs and adaptors are made from the highest quality material



	CAT.	Qty 1+	Qty 3+	Qty 6+
7 Pin Flat Plug to 7 Pin Large Round Socket	PA-2061	\$17.95	\$15.95	\$13.95
7 Pin Flat Plug to 7 Pin Small Round Socket	PA-2062	\$17.95	\$15.95	\$13.95
7 Pin Small Round Plug to 7 Pin Flat Socket	PA-2063	\$17.95	\$15.95	\$13.95
7 Pin Large Round Plug to 7 Pin Flat Socket	PA-2064	\$17.95	\$15.95	\$13.95
7 Pin Small Round Plug to 7 Pin Large Round Skt	PA-2065	\$17.95	\$15.95	\$13.95
7 Pin Large Round Plug to 7 Pin Small Round Skt	PA-2066	\$17.95	\$15.95	\$13.95

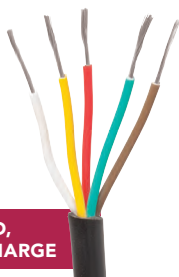
### 5 CORE BOX TRAILER CABLE - 10M - TINNED

A 10 metre length of the standard 5 conductors sheathed in a tough black PVC jacket. Conductor colours are listed below. Makes wiring easy.

- Yellow (Left indicator)
- White (Earth)
- Green (Right indicator)
- Red (Stop light)
- Brown (Tail light, no. plate & clearance)

\* Suitable for box trailers only.

You still must use 7 pin connectors.



NOW TIN PLATED,  
AT NO EXTRA CHARGE

	CAT.	Qty 1+	Qty 4+	Qty 10+
5 Core	WH-3091	\$39.95	\$35.15	\$29.95

### 7 CORE TRAILER WIRING LOOM - 10M - TINNED

A 10 metre length of the standard 7 conductors sheathed in a tough black PVC jacket. Conductor colours are listed below. Makes wiring easy. 10m accommodates even up to quite large boat trailers.

- Yellow (Left indicator)
- Black (Aux/reversing)
- White (Earth)
- Green (Right indicator)
- Blue (Electric brakes)
- Red (Stop light)
- Brown (Tail light, no. plate & clearance)



NOW TIN PLATED,  
AT NO EXTRA CHARGE

	CAT.	Qty 1+	Qty 4+	Qty 10+
7 Core	WH-3090	\$44.95	\$39.55	\$33.70



# Sight & Sound



## HOME THEATRE & AUDIO:

<b>Amplifiers</b>	<b>452</b>
<b>Audio / Video Leads</b>	<b>470</b>
<b>AV Senders</b>	<b>459</b>
<b>AV Switch Boxes</b>	<b>454</b>
<b>HDMI Leads &amp; Accessories</b>	<b>461</b>
<b>HDMI Accessories</b>	<b>463</b>
<b>IR Extenders</b>	<b>469</b>
<b>TV Brackets</b>	<b>484</b>
<b>Remote Controls</b>	<b>468</b>
<b>Set-Top Box</b>	<b>448</b>
<b>Speakers &amp; Accessories</b>	<b>455</b>
<b>Turntables &amp; CD Adaptors</b>	<b>447</b>
<b>TV Antennas &amp; Accessories</b>	<b>478</b>
<b>Video Converters</b>	<b>466</b>

## PERSONAL AUDIO:

<b>Bluetooth Adaptors</b>	<b>446</b>
<b>Headphones &amp; Earphones</b>	<b>442</b>
<b>Radios</b>	<b>449</b>
<b>Wi-Fi Smart Speaker</b>	<b>445</b>
<b>Wireless Speakers</b>	<b>445</b>

## PA & PARTY AUDIO:

<b>Amplifiers</b>	<b>452</b>
<b>DJ Equipment</b>	<b>489</b>
<b>Microphones &amp; Systems</b>	<b>487</b>
<b>PA Speakers &amp; Systems</b>	<b>490</b>
<b>Party Lighting &amp; Effects</b>	<b>492</b>

## CAR AUDIO:

<b>FM Transmitters</b>	<b>495</b>
<b>Hands-free Kits</b>	<b>495</b>
<b>Installation</b>	<b>502</b>
<b>Marine Audio</b>	<b>498</b>
<b>Monitors</b>	<b>502</b>
<b>Phone Holders</b>	<b>496</b>
<b>Speakers</b>	<b>500</b>





## HEADPHONES - WIRELESS

### OVER EAR STEREO BLUETOOTH® HEADPHONES

Totally self-contained with battery and Bluetooth®, so you can freely listen to your smartphone or music player (or Bluetooth® enabled Hi-Fi system) totally untethered. Of course they'll work from a standard 3.5mm audio source (cable included). Playback controls are featured on the side of the headphones, and their audio quality is fantastic. Of course these aren't just headphones - a built-in microphone gives you full hands-free capability for calls on your smartphone or gaming.

- Bluetooth® or 3.5mm connection
- 10min auto power-off
- Built-in microphone



SPECIFICATIONS	AA-2134
Battery	300mAh Rechargeable Polymer Li-ion Battery
Charge Time	Approx 2hrs
Usage Time	Approx 6hrs at 80% volume
Weight	303g
Dimensions	200(H) x 170(W) x 90(D)mm
Micro USB to 3.5mm Jack Cable Length	1.3m
Micro USB to USB Cable Length	560mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2134	\$49.95	\$44.95	\$39.95

### NOISE CANCELLING HEADPHONES WITH BLUETOOTH®

These Bluetooth® Noise Cancelling headphones offer crystal clear sound performance with dynamic sound and strong deep bass reproduction, with a built-in rechargeable battery that provides continuous playback of up to 12 hours. It folds flat in its supplied carry case, perfect for those long noisy trains and plane rides. Includes carry case, 3.5m audio cable for wired connection and USB charging cable.



Bluetooth®

SPECIFICATIONS	AA-2131
Speaker Frequency	20-20KHz
Bluetooth	V4.0
Bluetooth Range	Up to 10m
Playing Time	Up to 12hrs
Talk Time	Up to 14hrs
Charging Time	2-3hrs
Battery	Li-Ion 3.7V, 360mA
Dimensions	200(H) x 145(W) x 75(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10
	AA-2131	\$129.00	\$115.95	\$102.95

### WIRELESS INFRARED HEADPHONES - TWIN PACK

Infrared headphones are an excellent choice for relatively steady listening. That means they're an excellent choice for TV-watching or gaming etc. The base-unit will accept audio from any analogue input (3.5mm connection). They have an effective range of around 6m (about the same as a remote control). Two sets of headphones are supplied, which run from the same transmitter.

- No configuration required
- Two sets of headphones



SPECIFICATIONS	AA-2037
Headphones Power	2 x AAA Batteries each (not included)
Transmitter Power	12VDC Mains plugpack (included)
Transmission Distance	Up to 6m
Headphones Weight	247g (excluding batteries)
Transmitter Weight	67g
Headphones Dimensions	176(W) x 197(H) x 38(D)mm (when folded)
Transmitter Dimensions	120(W) x 20(H) x 80(D)mm

		CAT.	Qty 1+	Qty 4+	Qty 10
Infrared	Pair	AA-2037	\$99.95	\$89.95	\$79.95



### 2.4GHZ WIRELESS STEREO HEADPHONES WITH TOSLINK

Wireless headphones provide fantastic freedom for personal listening pleasure, but there's more than just no cable that makes these fantastic. Firstly, they have a powerful 800mAh battery for hours of listening, as well as a convenient charging dock on top of the base station. No fussing about with cables, just rest them on the base station and they'll begin recharging. What's more is connectivity - standard 3.5mm stereo audio is a given, but with direct digital TOSLINK connection you can enjoy premium digital audio without an additional digital de-coder! It also includes various cables and mains plugpack so there's nothing more to buy!

- 3.5mm & TOSLINK audio connection
- Rechargeable headphones
- Headphones sit on-top of sending unit to charge
- Volume up/down buttons on headphones
- Headphones can be connected directly to audio source via supplied 3.5mm or RCA cables
- Quality 2.4GHz transmitter



SPECIFICATIONS	AA-2036
Inputs	1 x 3.5mm, 1 x Optical
Power	5VDC @ 500mA
Battery	2.7V 800mAh Li-ion rechargeable
Weight	Headphones: 242g Transmitter: 226g
Dimensions	Headphones: 200(W) x 190(H) x 74(D)mm Transmitter: 235(H) x 112(Dia.)mm

	CAT.	Qty 1+	Qty 4+	Qty 10
	AA-2036	\$149.00	\$133.95	\$118.95



### INFRARED HEARING AID TRANSMITTER & RECEIVER

An ingeniously designed infrared TV hearing aid system that utilises tele-coil (t-coil) technology for use with most common hearing aids. Unlike other big and clunky TV hearing aid designs, this system has a comfortable and lightweight neck loop that picks up the audio signal from the infrared transmitter. The signal is then retransmitted electromagnetically to the hearing aid device producing crystal clear audio sound.

The infrared docking station has facility for two T-coil receiver neck loops. Simply dock the receiver and it will automatically charge the internal lithium battery which provides 8 hours of continuous use on a full charge. Features voice clarifying and noise cancelling technology, it also has automatic signal, balance & tone controls.

- Phone hearing aid function
- Chatting hearing aid function
- Wired listening hearing aid function for MP3, radio, PC etc
- Tone control
- Balance control
- Auto power off function for transmitter
- Battery life 8 hours



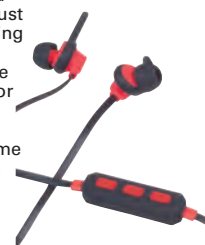
	CAT.	Qty 1+
Transmitter/Receiver	AA-2099	\$69.95

## WIRELESS EARPHONES

### BLUETOOTH® SPORTS EARPONES

Exceptionally lightweight, this headset provides a quality audio experience without any cables! At just 11g, you might even forget you're wearing anything at all! But it doesn't end there, these are a full-featured headset. Tether them to your smartphone and they'll act as a full handsfree device. Accept or reject calls, control music playback and volume - and the integrated microphone means you can be at the gym and talking on the phone at the same time. They'll run for a full 2hrs before they need a recharge too.

- Phone controls / handsfree
- Ultra lightweight



SPECIFICATIONS	AA-2135
Battery	Internal rechargeable (MicroUSB cable supplied)
Weight	11g
Length	750mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Bluetooth®	AA-2135	\$29.95	\$26.95	\$23.95



## ▼ HEADPHONES - WIRED

## LIGHTWEIGHT HEAVY BASS STEREO HEADPHONES

Designed for extra bass performance.

- Fully adjustable headband & speakers for greater comfort
- Supplied with 3.5mm plug and 6.5mm adaptor



SPECIFICATIONS	AA-2007
Driver Diameter	34mm
Power Handling	100mW
Nominal Impedance	32 Ω
Frequency Response	20Hz - 20kHz
Sensitivity	100dB
CAT.	Qty 1+ Qty 4+ Qty 10+
AA-2007	\$17.95 \$15.95 \$13.95



## HIGH QUALITY LIGHTWEIGHT STEREO HEADPHONES

Tipping the scales at a meagre 80 grams, these lightweight stereo headphones provide outstanding performance, clarity and comfort. Featuring high output drivers with neodymium magnets, they produce crystal clear sound with crisp highs and smooth bass response.

- Soft leatherette swivel ear pads, adjustable headset and 1.2m lead



SPECIFICATIONS	AA-2061
Driver Diameter	30mm
Power Handling	50mW
Nominal Impedance	32 Ω
Frequency Response	15Hz - 20kHz
Sensitivity	107dB
CAT.	Qty 1+ Qty 4+ Qty 10+
AA-2061	\$24.95 \$22.35 \$19.70



## OVER EAR STEREO HEADPHONES

Nothing beats a quality set of headphones. With comfortable padding and adjustment for a perfect fit, these are a great choice - even for extended use. They sound absolutely superb and offer great value for money.

- Comfortable
- Adjustable
- Quality audio



SPECIFICATIONS	AA-2133
Frequency Range	20-20000Hz
Impedance	32Ω
Sensitivity	110dB
Maximum Power Input	100mW
Plug	3.5mm Stereo golden plug
Microphone Frequency Range	-42+/-3dB (1kHz 0dB=1V/Pa)
Microphone Impedance	2.2KΩ
Microphone Sensitivity	-58dB +/-3dB
Cable Length	1.5m
Weight	309g
Dimensions	200(H) x 170(W) x 90(D)mm
CAT.	Qty 1+ Qty 4+ Qty 10+
AA-2133	\$29.95 \$26.95 \$23.95



## ▼ HEADSETS WITH MICROPHONE

## RECHARGEABLE BLUETOOTH® HEADSET

Lightweight headset with Bluetooth® wireless technology that can be connected with two Bluetooth® devices at the same time. Talk hands-free while driving, or connect to your Bluetooth® enabled PC or PS3 for hands-free chatting on Skype, MSN and other chat programs. Features anti-noise technology, voice command, last number redial and call rejection. The built-in Li-Po battery charges from a USB port (USB cable included). Compatible with Bluetooth® mobile phones and Smartphones.

- Bluetooth® V2.1 with 10m range
- Supports 2 multipoint connections
- Mono
- 3 hour charge time, 13 hour usage time
- 220 hour standby time
- Built in rechargeable Li-Po Battery
- Weight: 42g



Bluetooth®

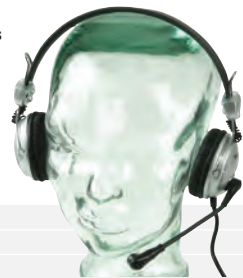
WARRANTY

CAT.	Qty 1+	Qty 4+	Qty 10+
AA-2080	\$49.95	\$44.90	\$39.90

## USB STEREO HEADSET

A true plug and play headset! It simply plugs into your computer's USB port and delivers excellent sound quality. The 38mm drivers ensure solid bass while maintaining a balanced response all the way up to 20kHz. The sensitive electret microphone is fitted to a flexible gooseneck and is fully adjustable. Perfect for gaming and VoIP communication. USB 2.0 compliant.

SPECIFICATIONS	AA-2032
Impedance	32Ω
Driver Diameter	38mm
Frequency Response	20Hz - 20kHz
MICROPHONE	
Sensitivity	-65dB
Sensitivity Pattern	Cardioid
CAT.	Qty 1+ Qty 4+ Qty 10+
AA-2032	\$39.95 \$35.90 \$31.90



WARRANTY

## GAMING HEADPHONES

A gaming headset designed for hardcore gamers who enjoy many hours of game-play and demand superior gaming audio, clarity, and bass. They are comfortable and adjust to different head sizes, look great and feature a microphone that swivels 120°. The microphone tucks away out of view when not required. The braided fabric audio lead is over 2m long and incorporates a volume control and mic mute switch.



WARRANTY

SPECIFICATIONS	AA-2126	MICROPHONE	
Driver Diameter	40mm	Mic. Diameter	6.0 x 5.0mm
Frequency Range	20Hz - 20kHz	Sensitivity	-38dB ± 3dB
Sensitivity	114dB ± 3dB	Directivity	Omnidirectional
Impedance	320hm	Plug Type	2 x 3.5mm stereo
Max. Input Power	30mW	Cable Length	2m
CAT.	Qty 1+ Qty 4+ Qty 10+		
AA-2126	\$49.95 \$44.90 \$39.90		

## Smart Hardware Competition:

### - COLIN PURKIS, SHOPS AT JAYCAR BROOKVALE

"This old school hand wired high gain guitar valve amplifier is built using off-the-shelf parts. A pair of 15-0-15 transformers and a voltage hextripler provide almost 400 volts for the HT section, and a standard 100v audio transformer with a centre tap performs output duties. The shine on the enclosure comes from 320 coats of shellac..."



## ✓ EARPHONES - MONO & STEREO

### MAGNETIC EARPICCE

Magnetic 8 Ohm earpiece with 3.5mm plug connected. Suitable for radios, portable TVs, etc.

- Lightweight and easy to use



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3300	\$3.95	\$3.50	\$3.15

### CRYSTAL EARPICCE

Crystal earpiece of high impedance with 3.5mm plug. Suitable for crystal sets or for experimental use.



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3305	\$5.95	\$5.25	\$4.75

### STEREO INNER EAR EARPHONES

Low cost inner ear phones that offer superb performance. Great replacement for your tired or damaged MP3 or iPod® players.

#### SPECIFICATIONS AA-2090

Speaker Diameter	10mm
Frequency Range	20Hz - 20kHz
Impedance	32 Ω +/- 5%
Sensitivity	105dB +/- 5dB
Max Power Input	10mW



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-2090	\$6.95	\$6.25	\$5.50

### STEREO INNER EARPHONES WITH BUILT-IN MIC

Quality stereo inner ear earphones with a built-in microphone. Enjoy hassle free music enjoyment without the inconvenience of having to remove your earphones when answering a call. Suitable for use with iPhone®s and other mobile devices where headphone mic is supported.

#### SPECIFICATIONS AA-2096

Speaker Diameter	10mm
Frequency Range	20Hz - 20kHz
Impedance	32 Ω +/- 5%
Sensitivity	105dB +/- 5dB
Max Power Input	10mW
Mic	-58dB±3dB



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-2096	\$9.95	\$8.75	\$7.75

### STEREO EARPHONES WITH RUBBER FINISH

Comfortable, no fuss earphone replacements. They feature comfortable in-ear rubber pads, and the lead features a built-in microphone. The microphone block features a small button for call answer / hang up too.

- Quality audio
- Built-in microphone
- Phone control button

#### SPECIFICATIONS AA-2136

Weight	11g
Length	1.2m



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-2136	\$7.95	\$7.15	\$6.35



## PILLOW SPEAKERS

A safe and convenient alternative to headphones or earphones whilst listening to music in bed. Simply plug in an MP3 player, iPod® or radio and place into a pillow case.

- Perfect for children and adults alike
- 1m lead with 3.5mm stereo plug
- No batteries required
- 1m removable cable with 3.5mm plug



SPECIFICATIONS	AS-3029
Impedance	16 Ω @ 1kHz
Rated Power	0.1W
Maximum Power	0.6W
Resonance Frequency	500Hz ± 20%
Dimensions	60mm Dia. Approx

CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3029	\$9.95	\$8.75	\$7.75

## Related Products:

### AEROPLANE HEADPHONE ADAPTOR

Use your own headphones in an aeroplane. 3.5mm stereo socket to 2 x 3.5mm mono plug. Suits planes with 2 x 3.5mm sockets.



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-3581	\$4.95	\$4.45	\$4.00

### 6 METRE CURLY EXTENSION LEAD - SUITS LARGER PLUG

6.5mm Stereo Plug to Socket



CAT.	Qty 1+	Qty 4+	Qty 10+
WA-7046	\$10.95	\$9.85	\$8.75

### HEADPHONE EXTENSION LEAD - SUITS SMALLER PLUG

3.5mm Stereo Plug to Socket.



CAT.	Qty 1+	Qty 4+	Qty 10+
WA-7046	\$10.95	\$9.85	\$8.75
WA-7011	\$9.95	\$8.75	\$7.75

### USB TYPE-C TO 3.5MM AUDIO ADAPTOR

Quick and easy headphone connection for your USB Type-C enabled device. Plug and play connection with most systems. Braided cable and gold-plated 3.5mm socket for long-lasting performance.



CAT.	Qty 1+	Qty 4+	Qty 10+
WC-7930	\$19.95	\$17.95	\$15.95



## ✓ WIRELESS SPEAKERS

### MINI PORTABLE SPLASHPROOF BLUETOOTH® SPEAKER

Pair on the go with your smartphone or other Bluetooth® streaming device. The speaker itself is rechargeable, so you can take it with you just about anywhere, and it's incredibly light. It features controls for playback (volume/play/pause/skip etc), but also the ability to answer or reject incoming calls! 10 metre effective range and up to 3 hours playback.




	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	XC-5227	\$19.95	\$17.95	\$15.95

### WATERPROOF SHOWER SPEAKER WITH BLUETOOTH® TECHNOLOGY

The device comes with a suction cap that allows you to stick it to any flat surface, and is powered by a built-in battery that can be charged with the supplied USB cable.



	 Bluetooth®			 WARRANTY
	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	XC-5630	\$27.95	\$25.15	\$22.35

## TRADE CARD

If you regularly purchase electrical and electronic goods to be used for business purposes you may qualify for a Jaycar Electronics Trade Card, which entitles you to substantial discounts on most Jaycar products\*. Discounts range from 5% to 30% depending on the type and quantity of products purchased.

\*Some products excluded and ABN will be required  
- see website, T&C or Store Manager for details.





## WIRELESS SPEAKERS (CONTINUED)

### LED LAMP SPEAKER

Beautiful and very functional. It features a rechargeable battery so you can put it just about anywhere, and either tether to a Bluetooth® audio source or playback from the microSD card; there's even a 3.5mm aux input! It recharges via USB (cable supplied) to provide up to 5hrs of playback, and provides beautiful LED illumination while being used. Easy to use, with great sound.



SPECIFICATIONS	XC-5228
Audio Source	Bluetooth, 3.5mm AUX, microSD Card
Transmission Distance	10m
Speaker	3W
Playback/Charge Time	Up to 5hrs / 3 hrs
Dimensions	121(H) x 96(Dia.)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
LED Lamp Speaker	XC-5228	\$29.95	\$26.95	\$23.95

### PORTABLE SPEAKER WITH NFC & BLUETOOTH® TECHNOLOGY

A portable speaker that allows you to carry your favourite music to anywhere you are. The near field communication (NFC®) feature allows you to effortlessly connect any NFC® enabled device to the speaker system wirelessly with a single touch. Without wires your music is streamed to the stereo speaker. At the same time using Bluetooth®, you can connect your Smartphone, Tablet or any Bluetooth® enabled computer. The device is supplied with USB charge cable and 3.5mm stereo aux-in cable. It has its own volume control and wireless range up to 10m. The speaker allows you to answer a phone call by just a click on the button located on the top.

- Microphone and hands free support
- Aux in, 3.5mm stereo socket
- Bass Diaphragm to reproduce ultra-low frequency sounds



SPECIFICATIONS	XC-5209
Output Power	2 x 2WRMS
Range	10m
Frequency Response	90Hz - 18kHz
Charging Time	3.5 hours
Playback Time	Max volume: approx. 5 hours, 80% volume: 6.5-7 hours
Dimensions	165(L) x 65(H) x 35(W)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	XC-5209	\$44.95	\$40.45	\$35.95

### RECHARGEABLE WATERPROOF SPEAKER WITH BLUETOOTH®

This portable waterproof speaker is perfect for listening to your music in the bathroom, at the beach, by the pool or while camping. Its rugged and portable design make this unit a perfect companion for outdoor activities. Once the speaker is paired with your Bluetooth® enabled Smartphone you can enjoy all of your favourite music. It also features a built-in microphone so you can take phone calls and have conversations through the speaker.

For direct connection, there is a 3.5mm aux jack and a micro-USB charging port.

- Package Includes USB charging cable and 3.5mm stereo audio cable



SPECIFICATIONS	XC-5213
Bluetooth® Version	3.0+EDR
Frequency Response	150-18kHz
Loud Speaker	2 x 4WRMS with Radiator Bass
Signal And Noise Ratio	≥75dB
Battery	1,800mAh
Operating Range	10 metres
Charging / Playback	Approx 2 hrs / Approx 8 hrs
IP Rating	IP66
Dimensions	195(L) x 75(W) x 55(H)mm, 440g



	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	XC-5213	\$69.95	\$62.95	\$55.95

### STEREO 36W VIBRATION SPEAKER

This is an ingenious improvement on a traditional Bluetooth® speaker design. In addition to two quality speakers, it also integrates a resonator for massive sound. By sitting the speaker on a large wooden table, pane of glass, or just about any other surface, it transfers energy through the resonator into the object it's sitting on. The result is a MASSIVE sound with richer bass and higher overall volume. There are some situations where you don't want the resonator active however (eg. late at night), so you can switch between resonator, speaker and resonator, and speaker only audio modes. All the usual features of Bluetooth® speakers are onboard, such as play/pause controls, track selection, and more. There's an AUX input if you want to connect via cable, and the internal battery will keep the tunes playing for around 4-hours.

#### Features:

- Bluetooth
- AUX
- Rechargeable Battery



SPECIFICATIONS	XC-5229
Output	2 x 5W (Speaker) / 26W (Resonator)
Input	5VDC @ 1000mA
Frequency	30Hz - 18kHz
Battery	Rechargeable Polymer 3.7V @ 3200mA
AUX	3.5mm Stereo Socket
Charge Time	3 - 4 Hours
Play Time	4+ Hours
Weight	725g
Dimensions	140(H) x 91(W) x 88(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Stereo 36W Vibration Speaker	XC-5229	\$149.00	\$133.95	\$118.95

## TicHome Mini Smart Speaker with Google Assistant:

A smart wireless speaker you can take anywhere in your home and experience a life of new possibilities with Google Assistant by your side. Built-in rechargeable battery (via USB) up to 6 hours use, Wi-Fi & Bluetooth, splash proof and available in 2 stylish colours. It sounds great too! See our website to see how amazing this product really is!



	CAT.	Qty 1+
Black	XC-6000	\$179.00
White	XC-6001	\$179.00

Check out our Smart Wi-Fi accessories compatible with Google Assistant; See page 365 for Smart Power Plugs See page 420 for Smart Light Bulbs

## AUDIO SENDER / RECEIVERS

### BLUETOOTH® HEADPHONE ADAPTOR

This genius device will convert your standard headphones into portable Bluetooth® headphones! Totally universal and easy to use. It weighs just 5g but will give you hours of playback. Tether to just about any Bluetooth® device while also gaining volume and track controls. It features a handy belt clip, and 3.5mm audio socket for universal compatibility.

#### Features:

- Rechargeable battery
- Belt clip
- Universal

SPECIFICATIONS	AA-2106
Battery	Rechargeable
Weight	5g
Dimensions	60(H) x 10(Dia.)mm (excluding clip)



CAT.	Qty 1+	Qty 3+	Qty 6+
AA-2106	\$14.95	\$13.45	\$11.95

### MINI BLUETOOTH® RECEIVER WITH USB CHARGING

This ingenious device provides Bluetooth® audio streaming on Hi-Fi and other audio playback devices without native Bluetooth®. The receiver recharges using the included USB recharge dock, then plugs into your 3.5mm audio socket. Then you simply pair your streaming device to the dongle and it's as if you connected a 3.5mm audio cable (but there's nothing to trip over!). The dongle itself includes playback controls, as well as a microphone, meaning you can use it as a full function hands-free device if you are paired with a smartphone. When it's running low on battery, simply pop it back into the USB charger and connect to a USB port to charge.

SPECIFICATIONS	AA-2105
Bluetooth® Distance	8m
Battery Capacity	100mAh 3.7V
Charging Time	2.5hrs
Talk Time	About 3hrs
Music playing Time	Up to 5hrs
Standby Time	20hrs
Working Interface	3.5mm Line Level Audio
Weight	26g
Dimensions	63(D) x 30(Dia.)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	AA-2105	\$29.95	\$26.95	\$23.95

### AUDIO RECEIVER WITH MUSIC CONTROL AND NFC/BLUETOOTH® TECHNOLOGY

A clever and convenient way to listen to your music or take calls on the go without having to be tethered to your phone or Tablet. It uses Bluetooth® 4.0 and Apt-x coding technology for high quality stereo audio transmission, and NFC® (Near Field Communication) that makes it easy and fast to pair with your phone with one touch. It features a rechargeable battery, belt/pocket clip and 3.5mm stereo socket to connect your own earphones, or to the car radio (even the home Hi-Fi) using the supplied 3.5mm audio cable. The micro USB port allows you to charge the device (cable included) or to stream music to your computer.

- Multifunctional buttons for track and volume control, or to answer and end calls
- Suitable power supply MP-3544



SPECIFICATIONS	AA-2087
Bluetooth® Version	4.0
Charge Time	2-3 hours
Standby Time	Up to 200 hours
Use Time	8 hours (average)
Transmission Range	10m
Dimensions	34(L) x 34(W) x 12.5(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth® + NFC	AA-2087	\$44.95	\$40.45	\$35.90

### AUDIO RECEIVER WITH NFC & BLUETOOTH® TECHNOLOGY

Stream music from your Bluetooth® or NFC® enabled Smartphone or Tablet directly to your stereo system or stand-alone speakers wirelessly. It is easy to setup and allows you to control the music from up to 10m away. Power can be supplied using the included 5V power supply or from a USB port on a stereo using 1.9m USB lead. A 1.8m male to male 3.5mm audio lead and a 3.5mm female to 2 x RCA lead are included to connect the receiver to the audio input of your speaker system.

- Bluetooth® 4.0v with SBC® support for high quality stereo audio
- Up to 10m transmission distance
- Can work with non-NFC® equipped devices
- A2DP Bluetooth® profile supported
- Audio stereo output
- Stores up to 8 device ID's



SPECIFICATIONS	AA-2108
Bluetooth® Version	4.0
Power	5V (power supply included)
Dimensions	58(L) x 58(D) x 15(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth® + NFC	AA-2108	\$54.95	\$49.45	\$43.95

### AUDIO DONGLE WITH BLUETOOTH® TECHNOLOGY AND TRANSMIT RECEIVE FUNCTIONS

Connecting one device to another has never been easier. This multidirectional device can be setup to transmit, or receive. In transmit mode, it can stream an audio source to a Bluetooth® capable receiver or standalone Bluetooth® speaker. In receive mode it can receive streaming from a Bluetooth® capable computer, iPhone®, and more, to play on your stereo system, computer, and more. It retains full digital quality and has an internal rechargeable battery. It charges in around 2hrs, for approximately 12hrs send/receive time. It's tiny and weighs just 18g, so you can take it anywhere!

- Send / Receive Mode Selection
- Rechargeable and Portable
- Extremely Lightweight



SPECIFICATIONS	AA-2104
Operating Frequency	2.4 GHz
Recharge Time	2hrs Approx.
Run Time	12hrs Approx.
Bluetooth® Standard	v4.1, Class II
Power	Internal 250mAh Lithium Battery
Recharge Method	USB Cable (Supplied)
Dimensions	44(W) x 44(D) x 12(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Bluetooth®	AA-2104	\$69.95	\$62.95	\$55.95

### WIRELESS DIGITAL AUDIO SENDER

This 2.4GHz digital audio sender uses a 34 channel frequency hopping transmission so you get seamless crystal clear audio. It includes two power supplies, however, the receiver can also be powered by 2 AA batteries so you can use it on the go with headphones.

- Typical transmission range is about 30 metres
- Provided with two audio cables



	CAT.	Qty 1+	Qty 3+	Qty 6+
2.4GHz Wireless	AA-2102	\$99.95	\$89.95	\$79.95

### Where's My Local Jaycar Store?:

Use our store finder on our website. With over 300 Jaycar Store and Stockists just type in your postcode or area to find the closest one to you.

## TURNTABLES

### 4-IN-1 TURNTABLE STEREO HI-FI WITH CD PLAYER

There's something about the smooth analogue sound of vinyl, that never gets old. Of course modern technology being fantastic too, we've combined a belt-drive turntable with a CD player and Bluetooth® streaming. You can even use a USB drive or the auxilliary input! Once you decide on your favourite media, they'll playback via the included speakers (or use the AUX output to connect to a larger system) to entertain for hours. Includes remote control.

- Belt-Drive Turntable for 33, 45, 78s
- CD Player and USB Port
- Bluetooth® Streaming
- Aux Input / Output
- AM/FM Radio



Bluetooth®

SPECIFICATIONS	GE-4100
Output Power	2 x 5WRMS
Bluetooth® Range	Up to 10m
Dimensions	295(L) x 320(W) x 50(H)mm
Speaker Size	140(W) x 210(L) x 210(H)mm

1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
Turntable	GE-4100	\$199.00	\$178.95	\$158.95
Spare Stylus - Pack of 2	GE-4137	\$9.95	\$8.95	\$7.95

## TURNTABLE ACCESSORIES

### VIDEO, AUDIO & CD DRIVE BELT

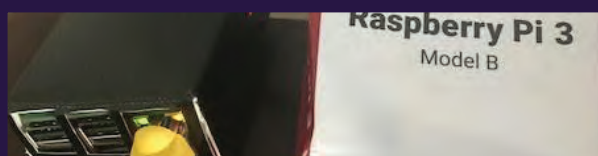
A selection of high quality drive belts for repairs and maintenance of a wide variety of video and audio equipment. The pack contains 25 of the most popular sizes in a combination of square and flat belts. There are 21 square belts ranging from 23mm to 120mm and 4 flat belts covering 56mm to 93mm. Belts lean more towards video use.



D	T	W	D	T	W	D	T	W	D	T	W
23	S	1.7	40	S	1.2	70	S	1.2	93	F	10.0
23	S	2.0	45	S	2.0	71	S	1.2	97	S	1.2
24	S	2.0	56	F	8.0	72	S	1.2	98	S	2.4
24	S	1.2	60	S	1.0	76	F	6.0	114	S	1.8
26	S	1.9	68	S	1.2	83	S	2.0	120	S	1.2
26	S	1.8	70	S	1.0	91	F	5.8	120	S	2.3
32	S	1.2									

D = Inside dia in mm, T = Type (Square or Flat), W = Width in mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	HP-0650	\$19.95	\$17.95	\$15.95



### Smart Hardware Competition:

- ROSS BUNKER, SHOPS AT JAYCAR BELCONNEN

"I'm an American living in Australia. I purchased a Raspberry Pi 3 from Jaycar in Canberra, Australia and turned it into a wireless access point and dedicated VPN to the United States."

### CARBON FIBRE RECORD BRUSH

Carbon fibre brushes are the best way to remove surface grit before playing vinyl records.

- Millions of microscopic hairs get into every groove and when you're finished
- Built-in handle has a cleaning bar to get rid of the dust from the bristles
- Essential for every turntable owner



	CAT.	Qty 1+	Qty 3+	Qty 6+
	GE-4051	\$14.95	\$13.45	\$11.95

### PORTABLE RECORD CASE

So you have purchased a portable record player, and you're taking it to a friend's place for a night of retro entertainment. But how do you transport your vinyl collection? Fear no more! This solid case will securely store up to 30 11" records, so you don't have to worry about them being damaged. Great for transport, or just to keep them safe from sticky hands at home.

- Dimensions: 350(W) x 180(D) x 370(H)mm



1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	GE-4101	\$49.95	\$44.95	\$39.95

## CD + CASSETTE PLAYERS

### PORTABLE CD PLAYER WITH ANTI-SHOCK

Put that huge CD collection to good use with this portable CD player. These days, many Hi-Fi systems come with an iPod® dock but no CD player! This one doubles as a personal music device (if you dare take it running), or can serve as a CD player for your larger Hi-Fi system via the Aux input it probably has. If you do want to take it with you, a huge 60-second anti-skip protection is built-in to keep the tunes playing. Powered by 2 x AA batteries (not included) for portability or it can also be powered by a 4.5VDC plugpack (not supplied). Includes a set of earphones on a 1.15m cable.

- 60-second anti-skip protection
- Battery-powered
- Earphones included



SPECIFICATIONS	GE-4085
Batteries	2 x AA (not included)
Anti-Shock Protection	60 secs
Dimensions	135(W) x 150(D) x 27(H)mm
Weight	195g (CD player excluding batteries), 13g (earphones)

1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	GE-4085	\$59.95	\$53.95	\$47.95

### CASSETTE TO MP3 CONVERTER

A totally self-contained cassette to MP3 converter. Simply insert your cassette tape, and your favourite USB drive, and you're ready to go! You can manually partition songs, or let the intelligent circuitry figure it out for you. No computer required, and it couldn't be easier! It's battery powered (2 x AA required) or power from a USB port (cable included). A set of earphones are included so you can listen while it's working too.



SPECIFICATIONS	GE-4102
Power	2 x AA Batteries or Included USB Cable
Run Time	1 Hour
Audio	Stereo L/R
Bit Rate	128kbps
Weight	145g (Excluding batteries)
Dimensions	116(W) x 94(H) x 35(D)mm

1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	GE-4102	\$69.95	\$62.95	\$55.95



## HOME ENTERTAINMENT

### CENTRE SPEAKER WITH BRACKET

Update or replace the centre speaker in your surround sound system with this great sounding speaker. It features 2 x 2.5" full range speakers rated at 15WRMS, housed inside a rectangular shaped speaker box to suit most existing systems.

- Supplied with adjustable swivel mount bracket for wall installations

SPECIFICATIONS	CS-2463
Speaker	2.5" x 2
Sensitivity	88dB
Power	15WRMS
Frequency Range	60-20kHz
Impedance	8Ω
Dimensions	170(H) x 100(W) x 89(D)mm

Accessories not included.



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 10+
15WRMS	CS-2463	\$39.95	\$35.90	\$31.90

### PASSIVE BOOKSHELF SPEAKERS

These stunning bookshelf speakers are well built for your listening pleasure. Ideal for replacing your old failed speakers, or making use of the additional speaker channels already on your Hi-Fi receiver to pipe music in another room. They're compact but powerful, and sound great. At just over 2kg each, you can easily sit them on a shelf, or grab some speaker brackets to mount them on a wall. Spring loaded speaker terminals.

Sold as a pair.

SPECIFICATIONS	CS-2459
Power Handling	2 x 10W
Nominal Impedance	4Ω
Frequency Range	70-20kHz
Weight	2.3kg (each)
Dimensions	150(W) x 190(D) x 230(H)mm (each)



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 10+
	CS-2459	\$79.95	\$71.95	\$63.95

### HIGH DEFINITION SET TOP BOX

Watch all the common free-to-air channels in high definition. If you're not home to watch your favourite shows, use a USB flash drive of your choice to record the programmes. The full-featured remote control offers total control over viewing, record/playback, and configuration from the comfort of your couch. It features high quality Composite, Component, and HDMI video outputs, as well as Digital (Coaxial) and Analogue (RCA) outputs, to suit whatever options you have with your current equipment. The electronic programme guide enables you to view all available stations, and customise them into a group. You can also record and watch separate shows at the same time (though they must be transmitted from the same tower, eg. ABC2 and ABC3 - you cannot watch ABC2 and record Channel 7 for instance). If you have photos or video on your computer that you would like to watch, simply load them onto your USB device, insert it into the Set Top Box and you have full playback control!

- High definition viewing
- USB recording & playback

Not available in New Zealand.



SPECIFICATIONS	XC-4929
Aspect Ratio	4:3 or 16:9 Selectable
Output Resolution	576i/p, 720p, 1080i/p
Compatible USB	Up to 2TB FAT32/NTFS
Record Time	Approx 2GB/hr in SD, 4GB/hr in HD
Input Frequency	177.5 - 226MHz, 522.5 - 830.5MHz
RF Input Level	-25 to -78dBm
Antenna Input	75Ω Pal Socket
Antenna Pass-Through	75Ω Pal Plug
Video Format	MPEG2, MPEG4 AVC / H.264
Video Output	Composite / Component / HDMI
Audio Output	Digital Coax / Analogue RCA



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 5+
	XC-4929	\$69.95	\$62.95	\$55.95

### MINI PROJECTOR WITH HDMI

This is a highly portable LED projector. By using a solid-state LED, it's more durable and won't require bulb replacement like traditional units. You can connect a HDMI, Composite, or VGA video source, or playback directly from a SD card. The projector displays at 800 x 480 pixel resolution, and will automatically downsample HD sources to suit. Ideal for office presentations, or the kids' playroom. Projection distance is up to 3m, which will provide around a 120" viewable size. A full featured remote control is included too.



WARRANTY

SPECIFICATIONS	AP-4003
Resolution	800 x 480 pixels
Projections Distance	1 - 3m
Projection Size	32 - 120"
Aspect Ratio	16:9 or 4:3
Keystone Correction	+/-15°
Input	HDMI / Composite / VGA or SD Card
Battery	Remote requires 2 x AAA batteries (not included)
Dimensions	208(L) x 165(W) x 70(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
50 ANSI Lumens	AP-4003	\$199.00	\$178.95	\$158.95

### TV SOUNDBAR SPEAKER WITH TOSLINK AND BLUETOOTH® TECHNOLOGY

This high quality sound bar works very well for a TV, but can also be used as a standalone Bluetooth® speaker. There are a variety of input sources including two 3.5mm stereo line inputs, as well as digital optical for fantastic clarity. The unit includes a handy remote control for mode selections and volume control. It can be easily wall mounted, or sit on your media cabinet. Sleek black finish to match just about any decor.



Bluetooth®

#### Features:

- 2 x 3.5mm stereo inputs
- TOSLINK optical input
- Wall mountable



SPECIFICATIONS	XC-5231
Output	2 x 5W
Frequency Response	130Hz - 16kHz
Driver	2 x 3"
S/N	>65dB
Distortion	<0.5%
Power	14V @ 1A
Weight	1.65kg
Dimensions	810(W) x 88(H) x 54(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-5231	\$79.95	\$71.95	\$63.95

### WI-FI HDMI MIRACAST DONGLE - V2.0

Plug the Anycast dongle into your TVs HDMI port and begin streaming content from your smartphone, tablet or PC to your TV. It features a self-explanatory screen mirroring function as well as DLNA and Airplay® for an almost universal ability to stream media from a compatible device.

Through the casting functionality, play YouTube, videos, pictures and an innumerable number of other streaming services straight on your TV. A great solution for those without smart TVs.

- Compatible with iOS®, Android & Windows/Mac®
- Free AllConnect or iMediaShare app from iTunes® or Google Play
- Stream or Mirror video and audio to any TV with HDMI
- Powered via USB Micro-B port



SPECIFICATIONS	AR-1922
Memory	128MB DDR3
Wi-Fi	802.11 b/g/n
Resolution	1080p, 720p
Media Sharing	Miracast, DLNA, Airplay® & Airmirror®
Supported Operating System	Android 4.2+, iOS® 7.0 +, Windows, Mac OS® X
Dimensions	57(L) x 36(W) x 12(H)mm



Wi-Fi

	CAT.	Qty 1+	Qty 4+	Qty 10
	AR-1922	\$54.95	\$49.45	\$43.95

## ✓ CONVERT VIDEO TAPE TO DIGITAL

### ECONOMY DVD MAKER

An easy to connect USB to video adaptor which allows you to capture high quality video and audio through a USB 2.0 interface to burn your own high definition DVD/VCDs. It's capable of real time recording MPEG 4/2/1 video formats. The compact size makes it ideal to take along anywhere. Operating couldn't be easier; with the one touch grabber; simply push the button to start and push again to stop.

#### System requirements:

- Pentium-IV 1.6GHz or higher (recommended)
- 256MB RAM
- Graphics card (must support DirectX 9.0c)
- Sound card
- 1GB free HD space
- Windows 8.1, 8, 7, Vista, XP, 2000



SPECIFICATIONS	XC-4991
Interface	USB 2.0
Video Input	Composite (RCA), S-Video
Audio Input	RCA Audio in
Capture Video Sources	VHS, V8, Hi-8, etc
Video & Video Formats	DVD, SVCD, VCD, MPEG-4, AVI, WMV, WMA, MP3
Image Formats	JPEG, BMP
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000
Dimensions	52(L) x 50(W) x 27(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
PC Only	XC-4991	\$39.95	\$35.90	\$31.90

### USB 2.0 DVD MAKER

Turn your aging collection of VHS and Betamax video tapes into new video productions or record live video straight to your DVD or CD burner. This powerful video recording and editing system will help you make your own DVD movies or family documentaries and uses the latest MPEG-4 compression to produce highquality real-time recordings from practically any AV source. The powerful editing software lets you add colour and transition effects as well as sound tracks and titles to your work. Send copies of your completed movies on DVD or VDC to your friends and family and keep them up-to-date with the goings-on at home. The USB interface makes connection a snap so you can be making movies and editing them in no time. Powered by the USB connection.

- Supports USB 1.1 & 2.0 Plug-and-Play
- Resolution up to 720 x 576 @25 fps (PAL) or 720 x 480 @30fps (NTSC)
- Composite Video input via RCA connector or S-Video mini-DIN
- Stereo audio input via RCA connectors
- Audio output via 3.5mm stereo plug
- Capture box: 35(W) x 95(D) x 15(H)mm
- Compatible with Windows 10, 8.1, 8, 7, Vista, XP



1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
PC	XC-4867	\$64.95	\$58.45	\$51.95

### USB MUSIC DIGITIZER

Easily convert your older analogue tapes, vinyl records, or any other audio source to digital MP3! Automatic song separation makes conversion and cataloging a breeze. Simply install your favourite SD card or USB flash drive, and you're ready to go. 3.5mm stereo and RCA inputs available, as well as 3.5mm stereo output for monitoring. No computer required.

#### Features:

- Converts audio to MP3
- Saves to USB drive or SD card
- Automatically separates song files
- Audio output for checking recorded files



SPECIFICATIONS	GE-4103
Records To	USB Drive, SD Card
Audio Input	3.5mm Stereo, 2 x RCA
Audio Output	3.5mm Stereo
Converter Format	MP3
Bit Rate	128Kbps
Power	5VDC @ 50mA
Weight	54g
Dimensions	66(W) x 62(D) x 23(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
USB Music Digitizer	GE-4103	\$49.95	\$44.95	\$39.95

## ✓ PORTABLE RADIOS

### PORTABLE AM/FM TRANSISTOR RADIO

Virtually unchanged for decades. This transistor radio provides AM/FM tuning in a compact package. It features a telescopic antenna, manual tuning dial, and physical frequency indicator. A 1-inch loudspeaker provides sound, or connect your favourite earphones.

- AM/FM selection
- Physical frequency dial
- Telescopic antenna
- Fits in the front pocket of your shirt

SPECIFICATIONS	AR-1458
Batteries	2 x AAA (not included)
Weight	60g
Dimensions	89(H) x 55(W) x 19(D)mm



1 YEAR WARRANTY

### 9 BAND FM/MW/SW POCKET RADIO

A powerful little radio capable of receiving FM/MW/ SW1-7 bands. Features full clock functions, an alarm, antenna, and a 3.5mm headphone jack for personal listening. Also features a handy fold-out stand so it can sit on a table at a comfortable viewing angle.

- Not PLL

SPECIFICATIONS	AR-1736
FM	88 - 108MHz
MW	530 - 1600kHz
SW	5.80 - 17.90kHz
Connections	3.5mm headphone jack
Power	3 AAA batteries or 3VDC plugjack (available separately)
Dimensions	110(L) x 20(H) x 24(D)mm



1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AR-1736	\$24.95	\$22.35	\$19.70

### AM/FM/SW RECHARGEABLE RADIO WITH MP3

A tri-band compact, portable AM/FM/SW radio with built-in MP3 player & digital clock. Listen to local AM/FM stations or international programs on the SW band. You can also connect a USB drive or microSD card and listen to MP3 tracks. Features a blue backlit LCD for easy use in the dark. Built-in rechargeable Li-ion battery inside and charges via the supplied USB cable. Also features a 3.5mm headphone jack for private listening. Supports USB flash drive and microSD card (32GB max).

- USB charge cable supplied
- Not PLL

SPECIFICATIONS	AR-1721
FM	70-108MHz
MW	522-1710kHz
SW	5.95-21.85MHz
Connections	3.5mm headphone jack
Power	Built-in rechargeable Li-ion battery
Dimensions	114(L) x 70(H) x 25(D)mm



1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AR-1721	\$34.95	\$31.45	\$27.95

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.





## WORLD BAND RADIOS

### WORLD BAND AM/FM/SW/LW/AIR PLL RADIO

A PLL world band radio loaded with a great list of features but easy to operate. Select from 5 available bands, FM, AM(MW, with 9 or 10k step), SW, LW and AIR bands. Tune to a desired frequency using the fast or slow scroll function and store up to 500 of your favourite radio stations. Includes carry case.

- Sleep function up to 120 minutes
- Manual, auto, or preset station search
- 3.5mm headphones output



SPECIFICATIONS	AC-1733
AM (MW Coverage)	522 - 1620 kHz(9k), 520 - 1710 kHz(10k)
FM Coverage	87.5 - 108.0MHz
SW Coverage	2300 - 26100Hz
LW Coverage	153 - 279kHz
AIR Coverage	118 - 137MHz
Power	Requires 2 x AA batteries
Dimensions	120(W) x 75(H) x 30(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AR-1733	\$79.95	\$71.95	\$63.95

### COMPACT WORLD BAND PLL RADIO WITH SSB

This is a very compact world band radio, covering the most popular frequencies. It features rapid digital tuning, loads of memory presets, and an easy to read display. Single Sideband Modulation (SSB) is used to obtain current reports, so is ideal for the keen fisherman or boating enthusiast too. The large internal speaker provides clear audio, or you can connect your favourite set of headphones instead. Powerful enough to receive what you want, and compact enough to take wherever you want.



SPECIFICATIONS	AR-1780
FM Coverage	87.5 - 108MHz
MW Coverage	522 - 1620kHz / 520 - 1710kHz
SW Coverage	2300 - 26,100kHz
LW Coverage	153 - 279kHz
AIR Coverage	118 - 137kHz
Batteries	4 x AA (Not included)
Weight	253g (Excluding batteries)
Dimensions	150(W) x 95(H) x 30(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AR-1780	\$129.00	\$115.95	\$102.95

## Tech Talk: What Is World Band?

World Band Radios are those radios that are capable of tuning into radio programs generated by, say the British BBC, Radio Australia (Australian ABC Radio programs), Voice of America, Radio Vatican, etc. These programs are transmitted on a regular weekly basis in any one 24 hour period. It is generally preferable to use 24 hour time, linked to GMT (Greenwich Mean Time) which is the time it is in London (UK) so that confusion is eliminated as when the program is broadcast. There are dozens and dozens of programs from countries all over the world in the special languages of these countries. For example if you are an Australian citizen but originally from Greece, you can tune into stations that enable you to keep your knowledge of the language up to date. The stations typically have a lot of local news which you would normally not hear. The World Band stations are generally broadcast in several frequencies at the same time, typically between about 1.8MHz & 29.00 MHz, especially between 7 & 21MHz. You can look up the broadcasting details on Google etc. Phase-Locked Loop (PLL) is a circuit configuration invented over 80 years ago. Originally the circuit was so complex that it only appeared in expensive radios. With modern microchip technology, the PLL got a lot cheaper. The benefits of PLL technology enabled receivers to remain on a station frequency with great accuracy. The radio circuit did not 'drift' PLL technology, though still not cheap, is a hallmark of quality short wave radios and that's why Jaycar specifies them.

### WORLD BAND AM/FM/SW PLL RADIO

Truly an ideal radio for the casual user and the enthusiast. It offers FM, MW(AM) stations and three Short Wave (SW) stations which range from 1,711kHz to 29,999kHz for receiving international broadcasts. The analogue tuning is assisted with a digital display and a tuning step, select fast for scrolling through the frequency or slow for that fine adjustment. Uses a Phase-Locked Loop (PLL) to ensure a stable reception. This unit is built with high performance IC's and MOSFET's that provide high sensitivity, strong antiinterference, low background noise and distortion. Includes a large back lit LCD displaying the frequency, clock, battery level and signal strength indicator. Other features includes AM RF gain, AM bandwidth switch, internal/ external antenna switch, Local/DX antenna switch, IF out, total of 50 presets - 10 presets for each band (AM/FM/SW1/ SW2/SW3), alarm function, snooze button, button lock, and the list goes on. Power options are 6 x AA (not included) used with supplied 6 x D size battery adaptors, 6 x D batteries (not included) or the supplied 9V PSU. Supplied with a carry strap.

- Large back lit LCD
- RF gain control
- Bass & treble controls
- Key lock
- IF output
- Line in and out
- Earphone socket
- Speaker 5W/4 Ω
- Local/DX antenna switch
- External antenna connection
- Internal full range speaker
- Mains or battery operated



SPECIFICATIONS	AC-1748
FM	87.5-108.0MHz
MW(AM)	522-1620kHz (9kHz); 520-1710kHz (10kHz)
SW	1,711-10010kHz; 9,990-20,010kHz; 19,990-29,999kHz
Dimensions	310(W) x 195(H) x 100(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
World Band AM/FM/SW PLL Radio	AR-1748	\$179.00	\$160.95	\$142.95

### WORLD BAND AM/FM/SW/AIR PLL SYNTHESISED RECEIVER WITH SSB

Ideal for a novice ham radio licensior, keen fisherman or even just the outdoors type, this radio has everything you will ever need in a radio with the added function of singlesideband modulation (SSB). SSB is used to obtain current weather reports, so it is perfect to take to sea to avoid changing weather conditions. However with great FM and AM coverage and battery operation it is also perfect for camping, BBQs and thanks to its world/local time selection clock and alarm, it can even be used as an alarm clock! Additional features include auto tuning saving, 500 memories and keypad direct entry. This is certainly a radio of many uses! Power options are 6 x AA (not included) used with supplied 6 x D size battery adaptors, 6 x D batteries (not included) or the supplied 9V PSU. Supplied with a carry strap.

- Large back lit LCD
- RF gain control
- Bass & treble controls
- Key lock
- IF output
- Line in and out
- Earphone socket
- Speaker 5W/4 Ω
- Local/DX antenna switch
- External antenna connection
- Internal full range speaker
- Mains or battery operated



HAS SSB!

SPECIFICATIONS	AR-1945
FM	87.5-108.0MHz
MW(AM)	522-1620kHz (9kHz); 520-1710kHz (10kHz)
AIR/SW	118 - 137MHz / 1799-29,999kHz
Dimensions	310(W) x 195(H) x 100(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
World Band Radio	AR-1945	\$219.00	\$196.95	\$174.95

### SHORTWAVE PASSIVE REEL ANTENNA TO SUIT AR-1748 & AR-1945

Designed for use with our shortwave radios (model AR-1748 and AR-1945) this reel antenna features two clips that attach to the telescopic rod antenna on the radio to boost reception. It's great for general reception improvement at home, when camping or on the road. When not in use just reel in the clips and it becomes a compact disc shaped package.

- Dimensions: 102(W) x 74(H) x 20(D)
- Max cable length: 7m



CAT.	Qty 1+	Qty 4+	Qty 10+
AR-1947	\$19.95	\$17.95	\$15.70



## AUDIO CONVERTERS

### COAXIAL/TOSLINK TO TOSLINK/COAXIAL DIGITAL AUDIO CONVERTER

This is a bi-directional converter for changing digital audio signals. Connect your coaxial or optical source, and you can connect optical or coaxial (or both) outputs! This unique design means it can also be used as a signal repeater - great for long digital audio connections. USB powered (mains power supply included).



SPECIFICATIONS	AC-1592
Input	1 x Coaxial RCA / 1 x TOSLINK (optical)
Output	1 x Coaxial RCA / 1 x TOSLINK (optical)
Power Consumption (Max)	1W
Dimensions	66(W) x 20(H) x 5(D)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1592	\$54.95	\$48.95	\$43.95

### DIGITAL TO ANALOGUE AUDIO CONVERTER

Converts your digital signal into analogue (RCA) stereo audio. Accepts either TOSLINK (optical) or digital coaxial, for compatibility with all digital sources.

- High quality sampling rate
- TOSLINK and coaxial input



SPECIFICATIONS	AC-1715
Sampling Rate	48kHz
Power	5VDC@1A (Mains adaptor included)
Weight	70g
Dimensions	63(W) x 42(D) x 26(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1715	\$64.95	\$57.95	\$51.95

### HIGH DEFINITION AUDIO DIGITAL-TO-ANALOGUE CONVERTER WITH USB INTERFACE & HEADPHONE JACK

The converter takes a TOSLINK optical, SPDIF coaxial or USB digital audio source and converts it to standard analogue left and right stereo audio. Allows for digital audio devices to be interfaced to analogue components such as a power amplifier, receivers, powered speakers or headphones via standard RCA line level output. It has a built in OP amp with adjustable volume control for earphones or headphones.

- Bridge legacy sound system with digital sources
- Support up to 24bit / 192kHz via to slink optical and SPDIF coaxial and USB interface
- Plug and play with Windows 7, XP & Vista & requires no additional drivers or software

*Note: This DAC accepts 2 channel digital audio only, and works with any PCM stream with Dolby Digital or DTS disabled*



SPECIFICATIONS	AC-1633
Inputs	USB / TOSLINK optical / SPDIF coaxial (Switchable)
Outputs	Left and right stereo audio RCA and 3.5mm stereo headphone jack (Built-in OP headphone amplifier)
Bit Rate	16-bit to 24-bit
Sample Rate	32kHz / 44.1kHz / 48 kHz / 96kHz / 192kHz (via TOSLINK. optical) 32kHz / 44.1kHz / 48 kHz / 96kHz (via USB)
Power Supply	5VDC 1A (included)
Dimensions	111(W) x 105(D) x 30(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1633	\$99.95	\$89.95	\$79.95

### AC3/DTS DIGITAL AUDIO TO ANALOGUE CONVERTER

Convert digital audio sources that use Dolby Digital AC3 Pro logic, DTS, PCM or other formats into 2.0 channel analogue audio output. This converter will accept input via TOSLINK/SPDIF or 1 x coaxial and output to 2 x RCA (L/R) and 3.5mm 2 channel analogue.



SPECIFICATIONS	AC-1658
Input	1 x TOSLINK/SPDIF, 1 x Coaxial
Output	2 x RCA (L/R), 1 x 3.5mm AUX
Snr	120dB
Degree Of Separation	85dB
Frequency Response	20Hz - 20kHz
Dimensions	72(D) x 55(W) x 20(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1658	\$99.95	\$89.95	\$79.95

### ANALOGUE TO DIGITAL AUDIO CONVERTER

Converts your analogue (RCA) stereo audio into digital signal. Outputs as either TOSLINK (optical) or digital coaxial, for compatibility with all digital inputs.

- High quality sampling rate
- TOSLINK and coaxial output



SPECIFICATIONS	AC-1716
Sampling Rate	48kHz
Power	5VDC@1A (Mains adaptor included)
Weight	70g
Dimensions	63(W) x 42(D) x 26(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1716	\$64.95	\$57.95	\$51.95

### GROUND LOOP ISOLATOR (STEREO) RCA

Used to eliminate ground loop problems (usually manifested as a low frequency hum) in audio connections. Earthing brown ground wires sometimes helps even more.

- Secure to a solid object with cable ties
- Very neat!



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-3084	\$9.95	\$8.75	\$7.75

### GALVANIC ISOLATION AUDIO FILTER

When certain audio devices are interconnected, it's possible to end up with what is referred to as a ground loop. You may not know what that is, but it results in a rather annoying "hum" coming from the speakers. In a vehicle it can also change pitch with engine speed. A galvanic isolation filter can be used to eliminate this electrical condition, removing the hum from the audio so you can enjoy the music properly! No power required, it simply connects inline with the line-level RCA connections, and you're ready to go.

#### Features:

- Gold-plated RCA sockets
- Can be wall-mounted
- No power required

SPECIFICATIONS	AA-3075
Input Ports	2 x RCA Sockets
Output Ports	2 x RCA Sockets
Input/Output Impedance	12kΩ
Frequency Range	20Hz to 30kHz
Operating Temperature	0°C - 40°C
Weight	135g
Dimensions	90(W) x 86(D) x 30(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10
Galvanic Isolation Audio Filter	\$49.95	\$44.95	\$39.95

## ✓ AMPLIFIERS - STEREO

### 2 X 18WRMS STEREO AMPLIFIER

Low cost mains powered.

This is a simple, fairly bullet-proof 18W/channel transistor amp and it's surprisingly loud! It is ideal as a small office or workshop PA amp in churches, community halls etc. It is protected from accidental speaker wiring shorts and if abused will simply shut down and reset after it has cooled off. It has a front panel microphone input, bass & treble controls as well as a master volume control.

- A suitable microphone for this unit is AM-4190



SPECIFICATIONS	AA-0472
Power	240VAC 50Hz 150mA
Output	2 x 18WRMS/4Ω
Response	50-18kHz + 3dB
Total Harmonic Distortion	0.08% @ 1W
S/N	60dB
Operating Temperature	0-50°C
Microphone Input	60mV @ 1k
Dimensions	170 x 77 x 157mm



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
2 x 18WRMS	AA-0472	\$39.95	\$35.90	\$31.90

### 2 X 15 WRMS PORTABLE STEREO AMPLIFIER

Sometimes mains power isn't available, or perhaps you're a busker and want to drive some PA speakers. This amplifier gives you the best of both worlds. It gives you 15WRMS into two 4" speaker outputs, which can be run from the mains adaptor supplied, or just 4 x AA batteries! Suits 4 and 8-ohm speakers for versatility. Compact and portable.



#### Features:

- Speaker de-thump circuit
- Intelligent short-circuit / over-temp protection
- Connects to any passive 4/8" speakers
- Accepts standard audio line output from any sound system

SPECIFICATIONS	AA-0517
Power Output	15 watts RMS x 2 into 4Ω
Total Harmonic Distortion	<0.04% @ 9W <10% @ 15W
Minimum Speaker Impedance	4Ω
Signal-to-Noise Ratio	103 dB, A weighted
Input Impedance	2kΩ ±5%
Frequency Response	20-20,000 Hz
Channel Separation	95 dB
Efficiency	>88% @ 10W, 8ohm
Batteries	8 x AA (not included)
Power	12VDC @ 2A
Weight	175g (excluding batteries)
Dimensions	152(W) x 100(D) x 52(H)mm



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
	AA-0504	\$79.95	\$71.95	\$63.95

### 2 X 20WRMS COMPACT STEREO AMPLIFIER

A very compact stereo amplifier, delivering 20WRMS to each channel. It's an ideal solution for powering speakers in an entertaining area, the garage, or anywhere you like. Gold plated RCA inputs are provided, with gold plated binding posts for speaker connections. A mains adaptor is included, but the 12-15VDC power requirement for the unit itself means it's also suitable for use in a vehicle, or on a boat. A power switch and volume control knob on the front give you the control you need, with nothing you don't.



WARRANTY

SPECIFICATIONS	AA-0518
Amplifier Output	2 x 20WRMS
Audio Input	2 x RCA line level
Audio Output	Gold plated binding posts
Power	12-15VDC (Mains adaptor included)
Dimensions	92(W) x 150(D) x 43(H)mm



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
2 x 20WRMS	AA-0518	\$99.00	\$88.95	\$78.95

### 2 X 25WRMS COMPACT STEREO AMPLIFIER

A compact amplifier that can deliver up to 25WRMS of power per channel. It is ideal for home, office or a small workshop. Connect audio to the stereo RCA or 3.5mm line input, connect your speakers to the push down spring terminals, connect power and you're in business. There is also a 6.5mm microphone input on the front, making it ideal for a small office or workshop PA system. Controls include mic volume, music volume, bass and treble.

- 18VAC 2.2A power supply included



SPECIFICATIONS	AA-0486
Power Output	2 x 25WRMS
Output Impedance	4 to 8Ω
Freq Response	5Hz to 65kHz, +/-3dB
S/N Ratio	72dB
Dimensions	216(W) x 65(H) x 150(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
2 x 25WRMS	AA-0486	\$129.00	\$115.95	\$102.95

### 2 X 20WRMS STEREO AMPLIFIER

This is an ultra-compact stereo amplifier that packs some punch. With two 20W channels, it'll provide more than enough power for outdoor speakers, ceiling speakers, or even larger Hi-Fi speakers. There are three sets of auxiliary inputs with a rotary selection dial on the front. A volume dial gives you overall output control, while balance, bass, and treble controls allow further customisation of the sound. Simply plug in your input, connect your 8-16Ω speakers to the spring-loaded speaker terminals, and you're ready to go! Mains powered.



SPECIFICATIONS	AA-0517
Power	240VAC @ 50Hz
Output Power	2 x 20 Watts
Output Impedance	8-16Ω (per channel)
Weight	2.6kg
Power Cable Length	1m
Dimensions	172(W) x 223(D) x 75(H)mm



WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 4+
2 x 20WRMS	AA-0517	\$149.00	\$133.95	\$118.95

### 2 X 120 WRMS STEREO AMPLIFIER WITH REMOTE CONTROL

Providing plenty of crisp audio power with two channels at 120WRMS each, this amplifier is ideal for powering a second set of speakers elsewhere in your home or office. With dual line audio input, you can connect your favourite audio sources. It also provides audio line back out, so you can install it inline with your current equipment too. A small headphone amplifier (and output socket) is conveniently provided, and heavy duty speaker terminals provide cable / banana plug connection. A large volume dial and black look is at home amongst any decor, and it includes a remote control so you don't have to walk over to the unit every time you want to use it.

#### Features:

- 6.5mm headphone output
- Two line-level inputs
- RCA stereo line output



WARRANTY

SPECIFICATIONS	AA-0520
Output Power	120W + 120WRMS
Power Input	220VAC @ 2A
Audio Input	Dual stereo RCA sockets
Audio Output	1 x Stereo RCA sockets
Speaker Output	2 x Stereo speaker cable receivers/banana plugs
Weight	3.2kg
Dimensions	250(W) x 275(D) x 90(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
2 x 120 WRMS Stereo Amplifier	AA-0520	\$249.00	\$219.00	\$199.00

## AMPLIFIERS - STEREO (CONTINUED)

### STEREO AMPLIFIER WALL PLATE WITH BLUETOOTH®

A fantastic solution that provides a powerful 15WRMS (per channel @ 4Ω) class-D stereo amplifier in a wall plate. Connect your favourite audio source via the aux input or pair via Bluetooth®, and use the onboard volume control to regulate overall level. The wiring for the speakers is behind the plate, allowing you to wire it directly to wall-mounted speakers elsewhere. This is perfect for a bathroom, a waiting room, or any room you want to be able to pipe a little music to. Includes 12VDC mains power supply.



SPECIFICATIONS	AA-0519
Audio Source	3.5mm stereo aux or Bluetooth
Bluetooth® Version	3.0 EDR Compliant
Bluetooth® Distance	10m
Amplifier Type	Class-D
Output Power	2 x 15WRS @ 4Ω
Power Input	12VDC @ 2A (mains adaptor included)
Dimensions	70(W) x 113(H) x 25(D)mm (Including Volume Knob)

	CAT.	Qty 1+	Qty 2+	Qty 4+
2 x 15WRMS	AA-0519	\$99.00	\$89.00	\$79.00

### TWO WAY STEREO SPEAKER SWITCH

This is a simple manual speaker switch so you can easily select between two different sets of speakers from the one stereo system. You can select from set A, set B, or A+B. Designed for use with 8-ohm speakers (the standard for HiFi speakers), you should check that your stereo can support 4-ohm speakers, since it will provide a 4-ohm load when using the A+B selection. Rated at 10WRMS per channel, plenty for indoor/outdoor speakers, ceiling speakers, and other applications.

#### Features:

- Non-shorting speaker contacts
- Select A, B, or A+B speaker sets
- No power required



SPECIFICATIONS	AC-1400
Speaker Impedance Recommended	A: 8Ω B: 8Ω A+B: 4Ω
Weight	102g
Dimensions	112(W) x 69(H) x 46(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10
	AC-1400	\$14.95	\$13.45	\$11.95

### HIGH POWER TWO WAY STEREO SPEAKER SWITCH

Perfect for controlling two sets of speakers from the one audio source for your indoor/outdoor area, separate rooms, and more. Simple operation with pushbuttons for both A and B sets so you can easily switch them on or off independently. Easy installation with screw terminals for speaker wires. No power required, suitable for systems up to 50WRMS per speaker.

#### Features:

- Pushbutton switches
- Aesthetic wall plate design
- Simple installation

Note: As speakers are connected in parallel in A+B mode the amplifier must be rated for half the rated speaker impedance.



SPECIFICATIONS	AC-1401
Maximum	50W RMS/100W per Channel
Switch Configuration	A or B or A+B
Minimum Impedance	4Ω based on 8Ω per speaker
Dimensions	115(H) x 70(W) x 72(D)mm (Including Switches)

	CAT.	Qty 1+	Qty 4+	Qty 10
	AC-1401	\$19.95	\$17.95	\$15.95

### Tell a Friend:

If you have a technical friend or someone who may be just interested in some of the products we stock, email his or her address details to:

Catalogue Department - Jaycar Electronics:  
catalogue@jaycar.com

## SPEAKER SWITCHERS & TESTERS

### 4 WAY STEREO SPEAKER SWITCH

Allows up to four pairs of speakers to be connected to a single entertainment unit or amplifier. Each pair of speakers may be individually turned on or off in any combinations via the push-button selectors.

- Dimensions: 176(L) x 110(W) x 48(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AC-1618	\$29.95	\$26.95	\$23.95

### 6 WAY SPEAKER SELECTOR SWITCH

This speaker selector box is perfect for anyone with a multi-room speaker system that they want to run from a master source. This selector box allows you to connect up to 6 pairs of speakers to your amplifier, and select any number of those pairs to play your music simultaneously. The outputs are all impedance matched so you won't ever damage the output stage of your amplifier.

- Solid metal construction
- Compatible with amplifiers up to 150 watts per channel
- Terminals accept up to 14-gauge wire
- Built-in protection circuit
- Dimensions: 285(W) x 180(D) x 55(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
6 Way	AC-1683	\$129.00	\$115.95	\$102.95

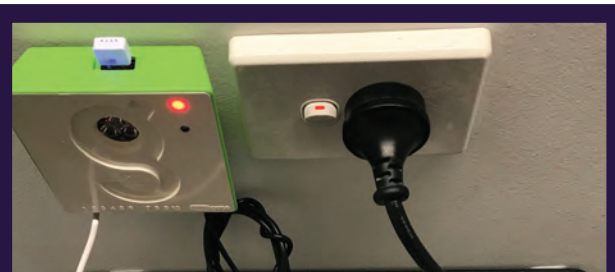
### SPEAKER POLARITY TESTER WITH TONE GENERATOR

Ideal for troubleshooting and testing an audio system and installation. It offers an output range of 0-8 volts at a variable 13Hz to 10kHz tone for setting system levels, checking speaker crossover points, verifying connections and general trouble-shooting. It features a 9V speaker popper for visually testing speaker connection polarity. Connections can be made via included RCA or alligator clips. It also features an auto shutoff for extended battery life.

- Tone generator, speaker polarity and RCA cable tester
- Output Range: 0V-8V
- 9V speaker popper
- RCA or alligator clips
- Power: Requires 9V Battery
- Dimensions: 100(H) x 65(W) x 23(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	AA-0414	\$29.95	\$26.95	\$23.70



### Smart Hardware Competition:

- WILL TISCHLER, SHOPS AT JAYCAR FRANKSTON  
"GoGoGate2 - IoT Garage Door Opener Pretty easy setup and installation. Access control, IFTTT, Access and ability to open & close your garage/s via your smartphone device."



## AV SELECTORS & SWITCHERS

### 2 WAY AV SELECTOR SWITCH

Switch between two composite video and stereo audio sources.

- Easy push-button operation



SPECIFICATIONS	AC-1650			
Channel Separation	60dB @ 1kHz			
Cross-Talk	70dB @ 1kHz			
Dimensions	135(W) x 50(D) x 32(H)mm			



	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Way	AC-1650	\$12.95	\$11.35	\$10.35

### 3 WAY AUDIO SELECTOR

Many audio amplifiers don't provide enough inputs for all your components. Solve that problem easily with this 3-way audio switcher. It takes up to three stereo RCA inputs and provides a single stereo RCA output. Easy-to-use pushbutton front panel.

- 3 stereo pairs of RCA inputs
- Dimensions: 133(W) x 42(H) x 85(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
3 Way	AC-1655	\$15.95	\$14.35	\$12.70

### 4 WAY AV SELECTOR

Connect up to four AV devices such as DVD players, VCRs or gaming consoles with a single output to your TV and switch between them as required.

- Inputs can be either composite or S-video
- Easy-to-use pushbutton front panel
- Composite and S-video inputs
- Dimensions: 190(W) x 112(D) x 47(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
4 Way	AC-1652	\$24.95	\$22.35	\$19.70

### 3 WAY TOSLINK SWITCH WITH IR

This versatile unit allows you to connect up to three TOSLINK sources to one TOSLINK input. Source selection is done via the supplied remote control, or the pushbutton on the side. An infrared receiver is also included so you can tuck the switch away with your equipment and still use the remote. The switch also features state-recall, which means your selected input is maintained even after the power has been switched off. Compatible with LPCM2.0, DTS, and Dolby AC3.

- Remote control or pushbutton operation
- Supports common digital audio formats



SPECIFICATIONS	AC-1594			
Supported Audio Formats	LPCM2.0 / DTS / Dolby AC3			
Peak Wavelength	650nm			
Max Baud Rate	16Mbps			
Dimensions	60(W) x 54(D) x 20(H)mm			



	CAT.	Qty 1+	Qty 4+	Qty 10+
3 Way	AC-1594	\$39.95	\$35.95	\$31.95

## Automatic Account:

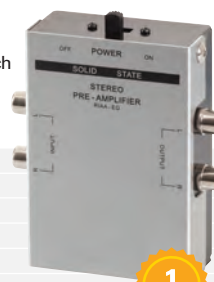
For Schools, Colleges, Universities, Government Departments, Radio & TV Stations – we'll open a 30-day account for you automatically. Just fill in the account form or apply online.

## AV AMPLIFIERS & PRE-AMPLIFIERS

### BATTERY OPERATED PHONO PRE-AMP

A simple 9V battery powered preamp. Used for connecting products with magnetic pick-ups such as turntables to an amp.

- 2 RCA inputs & 2 RCA out
- 1 x 9V battery required



SPECIFICATIONS	AC-1649			
Rated Input Level	3mV			
Max Input Level	38mV			
Input Impedance	50KΩ at 1,000Hz			
Output Level	1.8VRMS			
Output Impedance	50KΩ			
S/N ratio	50dB			
Dimensions	72(W) x 91(L) x 28(D)mm			

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AC-1649	\$24.95	\$22.35	\$19.70

### USB RECORDING PHONOGRAPH PRE-AMP

This fantastic device allows you to use your existing record player to record those fantastic vinyl tracks to USB! It also provides a preamp output to feed to your amplifier which may not have a "PHONO" input, when you're not recording to USB. It works natively with both Windows® and MacOS® systems, and is effectively plug n play. Then you can record using your computer's audio capture utilities! Audio sampling is up to an impressive 48kHz so you're sure you're capturing everything in high quality.

- Digitise Records using PC or Mac®
- High quality preamp
- Native operating system support



SPECIFICATIONS	AC-1593			
Recording	2 Channels			
Sampling Rates	8kHz, 11.025kHz, 16kHz, 22.05kHz, 24kHz, 32kHz, 44.1kHz, and 48kHz			
Compatibility	Windows & Mac®			
Power	Via USB cable or power supply (not supplied)			
USB	1.1			
Dimensions	128(W) x 30(H) x 70(D)mm			



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AC-1593	\$49.95	\$44.95	\$39.95

### PHONO STEREO PREAMPLIFIER

Vinyl records have become all the rage again but you may encounter a couple of issues which are addressed by this unit. Firstly, vinyl records are manufactured in a way that requires frequency equalisation of the turntable output to make them sound right. Secondly, if your amplifier doesn't have a phono input then you won't be able to listen to your records. This unit provides the necessary frequency equalisation and increases the signal level so that it can be fed to your line-level amplifier. There is a second set of inputs for a CD player or other device. There is a front panel switch to choose between input devices and a volume control on the front panel to adjust the output level as necessary as your turntables cartridge may provide a lower or higher output than expected. All connections are made with the popular RCA connectors. Power is provided by an included mains adapter.

#### Features:

- 2 x stereo RCA inputs
- Volume control
- Stereo RCA output
- Function can be set to mix or IND
- Screw mount holes
- RIAA equalisation for phone input



SPECIFICATIONS	AC-1591			
Power	12VDC @ 0.5A			
Input Impedance	47KΩ			
Output Impedance	100Ω			
Phono Amplitude Gain	40dB (@ 1KHz)			
AUX Amplitude Gain	6 dB			
Maximum Input	50mVpp			
Output Level	5Vpp			
Frequency Response	20 Hz to 20KHz			
Signal to Noise Ratio	70dB			
Dimensions	145(W) x 96(D) x 31(H)mm			

	CAT.	Qty 1+	Qty 4+	Qty 10
Phono Stereo Preamplifier	AC-1591	\$59.95	\$53.95	\$47.95

## In-Ceiling 2 Way Speakers

These ceiling speakers are a 2 way speaker design giving excellent audio quality compared to traditional PA speakers. Combining a coaxial woofer with dome tweeter they are available in three sizes to cover a variety of domestic and commercial applications. Two of the models also have adjustable tweeter mounts making them ideal when used in a home theatre setup by allowing you to direct high frequencies towards the centre of a room. The flush mount design and fold out retaining clamps allow them to be easily installed in new or existing ceilings, and the matte white finish blends in with most ceiling colours.

- Sold as a pair
- 8 ohm impedance
- Wired



SPECIFICATIONS	CS-2451
<b>Woofer</b>	5.25" polymer cone
<b>Tweeter</b>	25mm silk dome
<b>Tweeter Mount</b>	Fixed
<b>Rated Power</b>	30WRMS
<b>Frequency Range</b>	200-Hz - 18kHz
<b>Sensitivity</b>	87dB
<b>Minimum Mounting Thickness</b>	6mm
<b>Dimensions</b>	A 200, B N/A, C 170, D 60mm

SPECIFICATIONS	CS-2453
<b>Woofer</b>	6.5" polymer cone
<b>Tweeter</b>	25mm silk dome
<b>Tweeter Mount</b>	Swivel
<b>Rated Power</b>	40WRMS
<b>Frequency Range</b>	180Hz - 18kHz
<b>Sensitivity</b>	88dB
<b>Minimum Mounting Thickness</b>	8mm
<b>Dimensions</b>	A 230, B N/A, C 198, D 85mm

SPECIFICATIONS	CS-2455
<b>Woofer</b>	8" polymer cone
<b>Tweeter</b>	25mm silk dome
<b>Tweeter Mount</b>	Swivel
<b>Rated Power</b>	50WRMS
<b>Frequency Range</b>	120Hz - 18Hz
<b>Sensitivity</b>	90dB
<b>Minimum Mounting Thickness</b>	10mm
<b>Dimensions</b>	A 260, B N/A, C 228, D 85mm

CAT.	Qty 1+	Qty 4+	Qty 10+
5.25" CS-2451	\$64.95	\$57.95	\$51.95

CAT.	Qty 1+	Qty 4+	Qty 10+
6.5" CS-2453	\$79.95	\$71.95	\$63.95

CAT.	Qty 1+	Qty 4+	Qty 10+
8" CS-2455	\$99.95	\$89.95	\$79.95

### ▼ SPEAKER SYSTEMS

#### ABS 2 WAY INDOOR/OUTDOOR SPEAKERS

Attractive in design, these 2 way speakers are very versatile. Suitable for indoor and outdoor (covered areas) applications, they can be mounted to a wall or ceiling and can be rotated 180 degrees for perfect sound projection. Each has a polypropylene woofer and dome tweeter. Ideal for conference rooms, auditoriums, lecture halls or out on the patio.

- Sold as a pair
- Wired



**4" SPEAKERS**  
CS-2475



**5" SPEAKERS**  
CS-2476



**6.5" SPEAKERS**  
CS-2477



**8" SPEAKERS**  
CS-2478



SPECIFICATIONS	CS-2475	CS-2476
<b>Power Handling</b>	25WRMS	30WRMS
<b>Frequency Response</b>	120Hz - 20kHz	100Hz - 20kHz
<b>Nominal Response</b>	8 Ω	8 Ω
<b>Cabinet Size</b>	210(H) x 140(W) x 120(D)	245(H) x 185(W) x 168(D)mm
SPECIFICATIONS	CS-2477	CS-2478
<b>Power Handling</b>	40WRMS	50WRMS
<b>Frequency Response</b>	80Hz - 20kHz	50Hz - 20kHz
<b>Nominal Response</b>	8 Ω	8 Ω
<b>Cabinet Size</b>	296(H) x 217(W) x 190(D)mm	345(H) x 285(W) x 220(D)mm

	CAT.	Qty 1+	Qty 2+	Qty 10+
4"	CS-2475	\$69.95	\$62.95	\$55.95
5"	CS-2476	\$89.95	\$80.95	\$71.95
6.5"	CS-2477	\$129.00	\$115.95	\$102.95
8"	CS-2478	\$199.00	\$178.95	\$158.95

### ▼ WALL PLATE

#### 60 WATT SPEAKER ATTENUATOR WALL PLATE

A useful device for locally controlling the volume of speakers, from an amplifier located elsewhere. The connections are hidden behind a standard sized wall plate, making it perfect for ceiling or patio speakers. Also very useful in restaurants, health centres, or anywhere you may be running music to multiple areas but require localised volume. It caters for stereo (ie, left and right, or channel one and channel two) up to 60WRMS. The dial provides 6-different volume levels from Off to Full Volume. No power required.

##### Features:

- Lowest setting turns off
- Highest setting direct through
- 6-step volume control



SPECIFICATIONS	AC-1751
<b>Speaker Power Rating</b>	60WRMS, 20Hz - 20kHz
<b>Speaker Impedance</b>	4, 8, or 16ohm Speakers
<b>Switch</b>	0dB (straight through), -6dB, -12dB, -18dB, -24dB, Off (no connect)
<b>Mounting</b>	Standard electrical wall plate
<b>Weight</b>	109g
<b>Dimensions</b>	115(W) x 74(H) x 50(D)mm



CAT.	Qty 1+	Qty 5+	Qty 10
AC-1751	\$44.95	\$39.95	\$35.95

#### Related Products:

##### SPEAKER CEILING GRILLES

Available in 4" and 8".



	CAT.	Qty 1+	Qty 5+	Qty 10+
4"	AX-3550	\$4.95	\$4.45	\$3.90
8"	AX-3560	\$9.95	\$8.95	\$7.95

##### SPEAKER ATTENUATOR - 100W

A neat and functional solution for controlling the sound level in your multi-room audio speaker installation. The attenuator has 12 step level and fits in a single gang wallplate mount. It allows connection of up to 8 pairs of speakers to one stereo amplifier while maintaining correct impedance match between amp and speakers.



CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1665	\$59.95	\$53.95	\$47.90

## Response Paper Cone Woofers:

These Response woofers are excellent for replacement or for new speaker design construction. Not only are they price competitive & perform very well, but they look fantastic! The concave treated paper cone matched with rubber surround provides smooth overall response.

Housed in strong steel frame baskets, high power magnet & voice coils, these drivers will produce massive quantities of clean bass output for any musical application.



## RESPONSE



SPECIFICATIONS	CW-2190	CW-2192	CW-2194	CW-2199	CW-2198	CW-2199
Power Handling	27WRMS	50WRMS	60WRMS	90WRMS	225WRMS	225WRMS
Normal Impedance	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω
Frequency Response	70Hz - 7kHz	70Hz - 7kHz	44Hz - 7kHz	38Hz - 4.5kHz	40Hz - 1kHz	28 - 550Hz
Sensitivity	88dB SPL@1W, 1m	88dB SPL@1W, 1m	89dB SPL@1W, 1m	89dB SPL@1W, 1m	90dB SPL@1W, 1m	90dB SPL@1W, 1m
Re	6 Ω	6 Ω	6 Ω	6 Ω	5.41 Ω	5 Ω
Qms	1.73	1.40	2.02	1.46	1.01	3.46
Qes	0.67	0.72	0.57	0.43	0.47	0.40
Qts	0.48	0.47	0.44	0.33	0.32	0.36
Vas	5 litres	7.3 litres	19 litres	42-45 litres	80 litres	135 litres
Fs	59.9Hz	67.6Hz	49.5Hz	28.1Hz	59.8Hz	23.1Hz

	A	B	C	D(MM)	CAT.	Qty 1+	Qty 4+	Qty 10+
4"	116	109	93	65	CW-2190	\$24.95	\$22.35	\$19.70
5"	145	136	120	56	CW-2192	\$29.95	\$26.95	\$23.95
6.5"	178	168	145	77	CW-2194	\$34.95	\$31.45	\$27.90
8"	220	212	182	92	CW-2196	\$39.95	\$35.90	\$31.90
10"	258	245	235	110	CW-2198	\$64.95	\$58.45	\$51.95
12"	311	294	281	142	CW-2199	\$79.95	\$71.95	\$63.95

## Tweeters:

One unit is magnetically screened for applications where the device may be near a CRT screen, Home Theatre for example. The Titanium dome unit has quite a high power rating for a dome tweeter. Both are ferrofluid filled which keeps the voice coils cool and adds to reliability. We are delighted with these products.

### 25MM TITANIUM DOME TWEETER

This tweeter features a titanium dome with a phase shield which provides a more controlled high frequency roll-off. It produces very crisp & clear high frequencies.



## RESPONSE

SPECIFICATIONS	CT-2007
Power Handling	50WRMS
Nominal Impedance	8 Ω
Frequency Response	2 - 20kHz
Sensitivity	91dB SPL @1W, 1m



A	B	C	D(MM)	CAT.	Qty 1+	Qty 4+	Qty 10
104	94	70	27	CT-2007	\$19.95	\$17.70	\$15.70

### Find Out More In Store:

Our staff offer friendly and helpful service. We're here to help.

### RESPONSE RSN1005 PIEZO TWEETER

Does not require a crossover it's built in and is perfect for use for general PA applications where long throw is required.

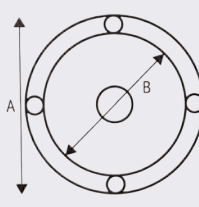


## RESPONSE

SPECIFICATIONS	CT-1930
Power Handling	100WRMS
Nominal Impedance	8 Ω
Frequency Response	1 - 20kHz
Sensitivity	93dB @1W, 0.5m

A	B	C	D(MM)	CAT.	Qty 1+	Qty 4+	Qty 10
85	101	75	70	CT-1930	\$12.95	\$11.65	\$10.35

### SPEAKER DIMENSIONS



A = From one side to the other  
B = Mounting Holes - Diagonal  
C = Cut Out in millimetres  
D = Depth



## SPEAKER / EQUIPMENT CABINET FITTINGS

### STRAP HANDLE

Incorporates metal sections on each end which hold the handle, and the rubber strap part returns flat after use.

- Strap is steel reinforced
- 2 x 8-10g screws required

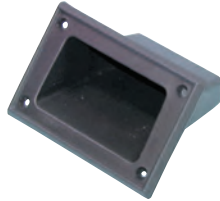
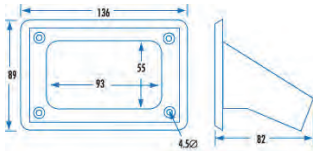


	CAT.	Qty 1+	Qty 5+	Qty 10+
255mm x 27mm	HS-8022	\$5.95	\$5.25	\$4.75

### POCKET HANDLE

Suitable for chipboard speaker cabinets or metal enclosures.

- Panel cutout: 102 x 48mm
- 4 x 8-10g screws required



	CAT.	Qty 1+	Qty 5+	Qty 10+
	HS-8012	\$3.95	\$3.45	\$3.15

### QUALITY EQUIPMENT FEET

You have probably seen new up market Hi-Fi equipment with large round feet - they give the piece of equipment a high class look. Well, now you can do it to your own gear. They are made of black rubber, with a silver metal edge on the bottom. They mount with a screw and nut (not supplied). Size - dia 43mm, height 13mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Each	HP-0834	\$2.95	\$2.60	\$2.30

### PLASTIC LOCKING CORNER PIECE

Heavy duty plastic moulded corner fitting featuring male/female inserts. These are designed to fit together so that pieces of equipment (the same size) can be stacked up and locked together.

- Ideal for stacking speaker boxes
- Has 4 x 4mm pan head fixing holes
- Dimensions 84(H) x 50mm each side



	CAT.	Qty 1+	Qty 5+	Qty 10+
Pack of 8	HM-3829	\$7.95	\$6.95	\$6.25

### HOOK & LOOP TAPE

Ideal for holding grilles on speaker cabinets. One side is glued or stapled to the box & the other to the grille. The grille then sticks to the box.



	CAT.	Qty 1+	Qty 5+	Qty 10+
300mm long	CF-2763	\$2.95	\$2.60	\$2.30

### SPRAY-ON CONTACT ADHESIVE

This pressure-sensitive contact adhesive is in an aerosol can, and bonds to paper, fabric, leather, rubber, foam, vinyl, concrete, metal, in fact almost any surface! No more spills and dribbles from a tube, or sticky screwdrivers (and plastic applicators) from applying glue to a surface. Great for laying innerbond and speaker carpet on speaker cabinets etc.

- Cannot be sent by air freight or post



	CAT.	Qty 1+	Qty 4+	Qty 10+
400g	NA-1504	\$16.95	\$14.95	\$13.35

## Attention Educators! Can we Help?

If you're a parent or teacher and would like some practical resources or help, then your local Jaycar Store or Stockist can assist you with a wide range of learning projects for all ages.

### FLARED SPEAKER BOX PORT

This port is flared to minimise air turbulence. It can be press fitted to the cabinet then sealed with caulk or silastic.

- Inner Dia: 58mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
120mm	CX-2688	\$4.95	\$4.45	\$3.90

### 650GSM ACRYLIC SPEAKER DAMPING MATERIAL

Used to line speaker boxes for standing wave/resonance absorption. Also very effective for making acoustic treatment like bass traps in sound rooms and studios.

- High density



	CAT.	Qty 1+	Qty 5+	Qty 10+
700(W) x 1000(L)mm	AX-3694	\$12.50	\$10.95	\$9.95

### SOUND DAMPENING ROLLER

Use this heavy duty roller to apply sound deadening material anywhere.

Features:

- Resin roller
- Wooden handle
- Metal roller frame with hex screws holding roller



	CAT.	Qty 1+	Qty 4+	Qty 10
Sound Dampening Roller	AX-3668	\$14.95	\$13.45	\$11.95

### COMBINATION BUTYL/FOAM SUPER SOUND DEADENER

Combining both the sound deadening properties of butyl material, and insulating properties of honeycomb foam, this is an easy single application solution for complete sound deadening and insulation that also offers thermal insulation. Consisting of a layer of our AX-3687 Butyl Based sound deadener and a 3.0mm thick layer of honeycomb foam (similar to our AX-3662), lining the cabin of your vehicle with these sound deadening sheets will give you drastically reduced road noise, less panel vibration and a cooler cabin temperature. Application is easy with the self adhesive backing and the ability to mould to the shape of the panel. Ideal for door skins, head linings, door cards and under bonnet insulation.

- Thickness: 4.5mm (1.5mm butyl, 3.0mm foam)
- Temperature range: -10 - 100°C



	CAT.	Qty 1+	Qty 4+	Qty 10+
660 x 330mm	AX-3689	\$29.95	\$26.95	\$23.95

### BUTYL BASED SOUND DEADENING MATERIAL

Give your vibrating buzz-box a luxury car ride with this butyl-based, foil backed sound deadening material. By adding weight to the metal panels of your car, such as door skins, boot lids, quarter panels, etc, you can stop nasty vibrations, reduce road noise, and give your doors and boot a nice solid "thud" when they shut. Each sheet is self-adhesive, and can be easily moulded, cut and stuck onto virtually any metal surface of your vehicle's body, giving you a pleasant, quiet and comfortable ride. Combine with our AX-3662 Sound Absorbing foam to add thermal insulation and eliminate low frequency humming from big exhaust systems for an even more comfortable vehicle interior.

- Thickness: 1.5mm
- Temperature range: -10 - 110°C



	CAT.	Qty 1+	Qty 4+	Qty 10+
900 x 330mm	AX-3687	\$29.95	\$26.95	\$23.95

### GRILL CLOTH

High quality, acoustically transparent grill cloth is ideal for protecting expensive drivers and allowing all of the sound to get through.

- Black in colour
- Supplied in a 1.5 x 1m pack



	CAT.	Qty 1+	Qty 5+	Qty 10+
	CF-2752	\$17.50	\$15.70	\$13.95

## ALL PURPOSE REPLACEMENT SPEAKERS

### 27MM (1.1")

- 8Ω
- 250mW



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3002	\$2.95	\$2.60	\$2.30

### 40MM (1.5")

- 8Ω
- 250mW



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3004	\$3.50	\$3.15	\$2.75

### 57MM (2.25")

- 8Ω
- 250mW



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3000	\$3.95	\$3.55	\$3.15

### 76MM (3")

- 8Ω
- 1W



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3006	\$4.25	\$3.75	\$3.30

### 50 X 90MM (2" X 3.5")

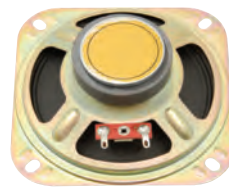
- 8Ω
- 5W



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3025	\$6.95	\$6.25	\$5.50

### 100MM (4")

- 4Ω
- 2W



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3008	\$4.75	\$4.15	\$3.75

### 125MM (5")

- 4Ω
- 6W



CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3007	\$7.95	\$7.10	\$6.25

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.



## SHIELDED 8 OHM FULL RANGE SPEAKERS

Full range speakers suitable for use in surround speakers in home theatre system, computer multimedia speakers and portable speaker designs. It has advanced alloy cone design coated with special damping material. See website for full specifications, frequency curves and technical drawings.

- Magnetically screened
- 4 x screw mounting holes
- Nominal Impedance (Z)(O): 8
- DC (Re)(O): 6.5

### 1"

- Dimensions(mm): 36(L) x 36(W) x 13.1(D)
- 1W



### 2"

- Dimensions(mm): 53(L) x 53(W) x 30.5(D)
- 10W



### 3"

- Dimensions(mm): 78(L) x 78(W) x 53(D)
- 15W



GENERAL DATA	AS-3030
Nominal Power Handling (Pnom)(W)	1
Max Power Handling (Pmax)(W)	2
Sensitivity (2.83v/1m)(dB)	79
Weight (M)(Kg)	0.03
VOICE COIL AND MAGNET PARAMETERS	
VC Diameter (mm)	19
VC Length (H)(mm)	3.4
VC Former	CCAW
VC Frame	Kapton
Magnet Former	Neodymium
Force Factor (BL)(N/A)	2.3
Gap Height (He)(mm)	1.5
Linear Excursion (Xmax)(mm)	0.95
T-S PARAMETERS	
Suspension Compliance (Cms)(uM/N)	626
Mechanical Q (Qms)	3.9
Electrical Q (Qes)	0.814
Total Q (Qts)	0.674
Moving Mass (Mms)(g)	056
Effective Piston Area (Sd)(m2)	0.0005
Equivalent Air Volume (Vas)(L)	0.04
Resonance Frequency (Fs)(Hz)	270

CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3030	\$12.95	\$11.45	\$9.95

GENERAL DATA	AS-3032
Nominal Power Handling (Pnom)(W)	10
Max Power Handling (Pmax)(W)	20
Sensitivity (2.83v/1m)(dB)	78
Weight (M)(Kg)	0.12
VOICE COIL AND MAGNET PARAMETERS	
VC Diameter (mm)	25
VC Length (H)(mm)	6
VC Former	CCAW
VC Frame	Kapton
Magnet Former	Neodymium
Force Factor (BL)(N/A)	2.2
Gap Height (He)(mm)	3
Linear Excursion (Xmax)(mm)	1.5
T-S PARAMETERS	
Suspension Compliance (Cms)(uM/N)	356
Mechanical Q (Qms)	4.6
Electrical Q (Qes)	2.2
Total Q (Qts)	1.56
Moving Mass (Mms)(g)	1.26
Effective Piston Area (Sd)(m2)	0.0013
Equivalent Air Volume (Vas)(L)	0.2
Resonance Frequency (Fs)(Hz)	260

CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3032	\$17.95	\$15.95	\$13.95

GENERAL DATA	AS-3034
Nominal Power Handling (Pnom)(W)	15
Max Power Handling (Pmax)(W)	30
Sensitivity (2.83v/1m)(dB)	82
Weight (M)(Kg)	0.53
VOICE COIL AND MAGNET PARAMETERS	
VC Diameter (mm)	20
VC Length (H)(mm)	9
VC Former	Kapton
VC Frame	CCAW
Magnet Former	Ferrite
Force Factor (BL)(N/A)	3.06
Gap Height (He)(mm)	3
Linear Excursion (Xmax)(mm)	3
T-S PARAMETERS	
Suspension Compliance (Cms)(uM/N)	920
Mechanical Q (Qms)	3.75
Electrical Q (Qes)	1.15
Total Q (Qts)	0.88
Moving Mass (Mms)(g)	2.6
Effective Piston Area (Sd)(m2)	0.003
Equivalent Air Volume (Vas)(L)	1.19
Resonance Frequency (Fs)(Hz)	100

CAT.	Qty 1+	Qty 4+	Qty 10+
AS-3034	\$19.95	\$17.95	\$15.95

## AV Senders

AV senders transmit video & 2 channel audio across short distances in, say, an office or home. They have been around for over 10 years now and have more recently incorporated HDMI for higher resolution video. You may be wondering why these still exist with the dominance of Wi-Fi, Bluetooth, etc. They still have their place as they work fantastically well. The wired units utilise your power wiring or CAT 5 Ethernet cable, whilst the wireless units use digital RF encoding on the 5-5.8GHz bands. Both are ideal if you want to send an AV, Xbox®, PS3 etc. signal from one room to another room or several others. Digital technology renders them quite immune to interference - both to you and from you. All models also feature infrared repeaters so you can change channel and operate other IR controlled gear from another room.



### ✓ AV SENDER - WIRED

#### HDMI POWERLINE TX/RX

Transmit a HDMI source through your existing home power lines. It will allow you to watch the content of your DVD or other HDMI device in 2 separate rooms without using RF transmission or long cables. Ideal for locations with concrete walls or complex structure where RF transmission isn't suitable, the signal is sent over the building's existing power wires. Simply connect the mains connection transmitter to your HDMI device, and the receiver to a HDMI compatible TV in another room up to 300 metres away. It also allows an IR remote control signal to be sent from the 2nd room to your HDMI device. To operate, the transmitter and receiver need to be on the same power circuit and be plugged directly into the power point, do not use an extension cord or powerboard.

##### Features:

- Transmits HDMI signal over your home power wiring
- Supports one to many connection
- Extends your HDMI signal up to 300m
- Supports IR pass back
- Supports up to 1080p
- Easy setup, plug and play



	CAT.	Qty 1+	Qty 2+	Qty 4+
HDMI Powerline TX/RX	AR-1903	\$449.00	\$399.00	\$359.00

#### POWERED CAT5 VGA BALUNS WITH AUDIO

Able to transmit VGA and audio signals across a standard UTP or STP CAT5 cable for distances up to 300 metres. Adjust the brightness and skew of the image with the peak and gain options. Use for classrooms, lecture halls, auditoriums, retail kiosks, video info displays, tradeshows, etc.

- Ideal for VGA monitors or LCD projection screens
- Supports up to 1920 x 1200 pixels
- Supplied as a sender and receiver pair with plug packs included

SPECIFICATIONS	AC-1671
Input Voltage	5VDC (Mains adaptor included)
Input/Output	VGA/CAT5 (Send), CAT5/VGA (Rec)
Resolution	Up to 1920 x 1200
Range	Up to 300m
Dimensions	100(L) x 65(W) x 26(H)mm



See page 311 for Cat5 leads and page 314 for VGA leads.

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AC-1671	\$129.00	\$115.95	\$102.95



## ✓ AV SENDER - WIRELESS

### WIRELESS 5.8GHZ AV SENDER/RECEIVER WITH WIDEBAND IR EXTENDER

Allows you to send your PayTV reception (or any other video source) to any part of the house. Includes a wideband IR remote control extender so it will cope with even the fussiest remote controls. 5.8GHz transmission frequency ensures freedom from wireless network interference. Includes power supplies, AV cables 7 extension IR LED.

- Video: Composite or S-video
- Audio: Stereo RCA
- Range: 60m (line of sight)

SPECIFICATIONS	AR-1913
Input Voltage	12VDC/250ma (Mains adaptor included)
Input/Output	Composite/S-Video
Resolution	480i
Range	Up to 60m
Dimensions	110(W) x 105(D) x 38(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
Transmitter/Receiver	AR-1913	\$99.95	\$89.95	\$79.95
Spare Receiver	AR-1916	\$64.95	\$58.45	\$51.95

### WIRELESS 5.8GHZ 1080P HDMI AV SENDER/RECEIVER

Providing crystal clear digital transmission of 1080p Full HD HDMI signals up to 30m. Sure, you can get a long cable, but who wants the hassle of running it!? Amazing bandwidth of up to 10.2Gbps, but will cater for lower resolutions equally well. For added convenience, an infrared extender is full integrated, so you can use your remote control on the receiver end for full control of your devices too! Full HD means it's ideal for Home Theatre systems, meeting rooms, gaming, and much more. It's also convenient to connect a computer to a display where they may not be in close proximity. Includes all power supplies and infrared hardware.

#### Features:

- 1080p full HD
- 5GHz digital transmission
- IR extender
- 30m range

Input Voltage	5VDC/2A (Mains adaptor included)
Input/Output	HDMI V1.3
Resolution	Up to 1080p
Range	Up to 30m
Dimensions	118(W) x 80(D) x 22(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
Wireless 5.8GHz 1080p HDMI	AR-1908	\$399.00	\$359.00	\$319.00

### MINI 5GHZ 1080P HDMI WIRELESS AV SENDER

Power in your pocket! Perfect for travelling presentations, lecturing, or even home streaming from your laptop. Unlike most units for home and office, the transmitter for this unit is barely larger than a USB flash drive. It plugs straight into the HDMI socket on your laptop, using USB power. Wireless transmission is on the ultra-reliable 5GHz band for minimal interference and high quality transmission. The receiver is compact and can be placed up to 20m away! Infrared passback is included so you can control infrared devices at the source too. Stereo audio is also transmitted. A powerful package that's fully plug and play, so there's no fuss setup eve-ry time. HDMI 1.3 and HDCP 1.2 compliant for the ultimate in HDMI compatability.

- HDMI 1.3 / HDCP1.2
- 1080p full HD
- Point to point wireless configuration
- IR passback with 20-60kHz frequency
- Plug and play
- 20m transmission distance

Input Voltage	5VDC (Mains Adaptors Included)
Input/Output	HDMI V1.3
Resolution	Up to 1080p
Range	Up to 20m
Dimensions	132(W) x 95(D) x 20(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
Mini 5GHz 1080p HDMI	AR-1909	\$369.00	\$329.00	\$289.00

## HDMI Leads - Comparison Guide

	Quality	Connectors		Length
<b>WQ-7913</b>	Bargain	HDMI Plug	HDMI Plug	1.5m
<b>WV-7915</b>	Good	HDMI Plug	HDMI Plug	1.5m
<b>WV-7916</b>	Good	HDMI Plug	HDMI Plug	3.0m
<b>WV-7917</b>	Good	HDMI Plug	HDMI Plug	5.0m
<b>WQ-7906</b>	Best	HDMI Plug 4K	HDMI Plug 4K	0.5m
<b>WQ-7900</b>	Best	HDMI Plug 4K	HDMI Plug 4K	1.5m
<b>WQ-7902</b>	Best	HDMI Plug 4K	HDMI Plug 4K	3.0m

	Quality	Connectors		Length
<b>WQ-7904</b>	Best	HDMI Plug 4K	HDMI Plug 4K	5.0m
<b>WQ-7905</b>	Best	HDMI Plug 4K	HDMI Plug 4K	10.0m
<b>WQ-7436</b>	Best	HDMI (amp) Plug 4K	HDMI (amp) Plug 4K	30.0m
<b>WQ-7437</b>	Best	HDMI (amp) Plug 4K	HDMI (amp) Plug 4K	10.0m
<b>WQ-7438</b>	Best	HDMI (amp) Plug 4K	HDMI (amp) Plug 4K	15.0m
<b>WQ-7435</b>	Best	HDMI (amp) Plug 4K	HDMI (amp) Plug 4K	20.0m
<b>WQ-7439</b>	Best	HDMI (amp) Plug 4K	HDMI (amp) Plug 4K	30.0m

### BARGAIN HDMI 2.0 LEAD

Sometimes you don't need all the extra features of the top quality cables. This will still provide high quality 1080p vision, and it is such a bargain, you can grab spares!

#### Features:

- 1.5m length
- Full HD compatible
- 33g



	CAT.	Qty 1+	Qty 4+	Qty 10
WV-7913		\$8.95	\$8.05	\$7.15

### HDMI LEAD WITH ROTATING PLUGS

HDMI cable with a difference - the plug on each end of the cable rotates through 180° to accommodate whatever installation challenge you have.

- 1.5m length
- HDMI 1.3 compliant



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7401	\$13.95	\$12.45	\$10.95

### ECONOMY HDMI 1.4 LEADS

HDMI leads needn't cost an arm and a leg. If your budget doesn't extend too far, these leads are a cost-effective solution without compromising quality or performance.

All have gold plated connectors and have HDMI 1.4 Standard with Ethernet classification.



LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	WV-7915	\$14.95	\$13.45	\$11.95
3.0m	WV-7916	\$19.95	\$17.95	\$15.95
5.0m	WV-7917	\$27.95	\$24.95	\$21.95

### HIGH QUALITY HDMI 2.0 LEADS

Premium HDMI 2.0 High Speed with Ethernet cables feature heavily plated 24K gold plated connectors and oxygen-free heavy copper cabling. Also featured are high quality moulded strain-relief cord grommets and a braided sheath to protect against wear.



## CONCORD

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
0.5m	WQ-7906	\$19.95	\$17.95	\$15.95
1.5m	WQ-7900	\$24.95	\$22.45	\$19.95
3.0m	WQ-7902	\$34.95	\$30.95	\$27.95
5.0m	WQ-7904	\$44.95	\$39.95	\$35.95
10m	WQ-7905	\$64.95	\$57.95	\$51.95

For our NEW PCB Mount HDMI Connectors see page 188

## Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck\*.

\*Conditions apply – see page 526 For details

### AMPLIFIED HDMI 2.0 LEADS WITH ETHERNET - 4K UHD COMPATIBLE

Very long HDMI runs are often unavoidable.

Your best way to success is using an amplified cable, designed to compensate for any loss over the length of the run. This cable retains all the bandwidth you need while still providing an ultra long cable. Absolute compatibility to HDMI standards, using top-quality oxygen-free-copper (OFC) and braided aluminium shielding, with gold-plated connectors. Suitable for Full HD, 4K, 3D, & UHD signals.



#### SPECIFICATIONS

WQ-7437 / WQ-7438

#### Bandwidth

18Gbps 4K @ 60Hz

#### Frequency Range

25MHz-600MHz

#### Supports

12-bit Deep HDR, Full HD, Full 3D, and 4Kx2K 60Hz

1 YEAR WARRANTY

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
10m	WQ-7437	\$79.95	\$71.95	\$63.95
15m	WQ-7438	\$99.95	\$89.95	\$79.95

### 30M AMPLIFIED HDMI 1.4 LEAD

After about 5 metres HDMI signals tend to degrade. Pixels get missed and you may notice artefacts known as 'sparkles' on your TV when the receiving unit simply can't re-assemble the digital data correctly. These amplified HDMI leads overcome this limitation allowing you much longer HDMI cable runs.

- Powered from the HDMI port
- HDMI High Speed with Ethernet
- HDMI 1.4 Compatible / 4K 30Hz



CONCORD

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
30m	WQ-7436	\$99.95	\$89.95	\$79.95

See page 465 for HDMI Extenders.

### AMPLIFIED HDMI 2.0 LEADS

Long HDMI leads require amplification of the signal to ensure there's no signal loss across the long run. This cable provides all amplification, and even includes a USB power adaptor for use with older HDMI systems. Suitable for use with 4K at up to 60fps. Includes ethernet and full audio passthrough.

- Maintains signal integrity
- USB power adaptor included
- Amplified for maximum performance



	CAT.	Qty 1+	Qty 4+	Qty 10
20m Amplified HDMI Cable	WQ-7435	\$119.00	\$106.95	\$94.95
30m Amplified HDMI Cable	WQ-7439	\$139.00	\$124.95	\$110.95

### 30CM HDMI EXTENSION LEAD (PASSIVE)

Perfect for connecting streaming devices and dongles into hard-to-reach places, or tight spaces. HDMI 2.0 compatible for 4K at up to 60fps.

- Convenient
- HDMI 2.0 compatibility (4K up to 60fps)
- Ports: HDMI Socket, HDMI Plug
- Weight: 24g
- Cable Length: 300mm



	CAT.	Qty 1+	Qty 4+	Qty 10
WV-7905		\$14.95	\$13.45	\$11.95

## ✓ HDMI LEADS (CONTINUED)

### HDMI PLUG TO TYPE C HDMI PLUG

Type A plug to Type C or 'Mini' HDMI plug cable for connection to portable HDMI devices.

- Gold plated shield/24K gold contacts
- Internal dual strain relief
- Triple shielded
- Nitrogen gas injected dielectric
- RoHS & HDMI v1.3 compliant



## CONCORD

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
3.0m	WQ-7412	\$29.95	\$26.95	\$23.95

## ✓ HDMI ADAPTORS

### DVI-D TO HDMI CABLE

- HDMI to DVI-D connector



## CONCORD

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
1.5m	WQ-7407	\$19.95	\$17.95	\$15.95
3.0m	WQ-7406	\$29.95	\$26.95	\$23.95

### DISPLAY PORT PLUG TO HDMI SOCKET



WQ-7422

### HDMI 1.4 TO MICRO D PLUG LEAD

HDMI to Micro D plug with 2m lead.



WQ-7911

ALL HDMI LEADS HIGH SPEED WITH ETHERNET

LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
150mm	WQ-7422	\$29.95	\$26.95	\$23.70
2.0m	WQ-7911	\$29.95	\$26.95	\$23.95

### HDMI PLUG TO SOCKET SWIVEL ADAPTOR

Connect HDMI cables where space is an issue such as wall mounted TV's with this adaptor which swivels up to 180°.

- Gold plated connectors



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-3647	\$12.95	\$11.35	\$10.35

### MICRO HDMI PLUG TO HDMI SOCKET ADAPTOR

Connects your Smartphone, camera or other device with micro HDMI socket to any TV with a HDMI connection.

- Colour: Black
- Gold plated connectors



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-3649	\$9.95	\$8.75	\$7.75

### HDMI ADAPTORS



	CAT.	Qty 1+	Qty 4+	Qty 10+
HDMI Socket to Socket	PA-3640	\$16.95	\$15.25	\$13.55
HDMI Plug to DVI-D	PA-3642	\$14.95	\$13.45	\$11.95
HDMI Socket to DVI-D Plug Adaptor	PA-3644	\$14.95	\$13.45	\$11.95
Mini HDMI Plug to HDMI Socket Adaptor	PA-3645	\$9.95	\$8.75	\$7.75

### UNIVERSAL HDMI CABLE FOR SMARTPHONES

Connect a large display to your smartphone quickly and easily. This ingenious device provides a USB plug for power (optional depending on your devices), HDMI plug to connect to the TV, and a USB socket. Simply connect your smartphone with its USB charge/sync cable to the USB socket, and you're ready to go! No longer are your cat videos confined to your smartphone screen! Compatible with modern iOS and Android devices, with no app installation required. Supports resolutions up to 1080p.

- Connect a mobile device to a HDMI screen
- Compatible with iOS 8, Android 4.5, or higher
- Plug and play

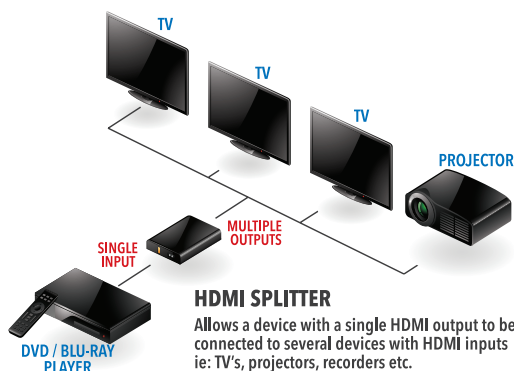


SPECIFICATIONS	WC-7650
Weight	72g
Cable Length	2.7m
Dimensions	26(W) x 6(H) x 69(D)mm

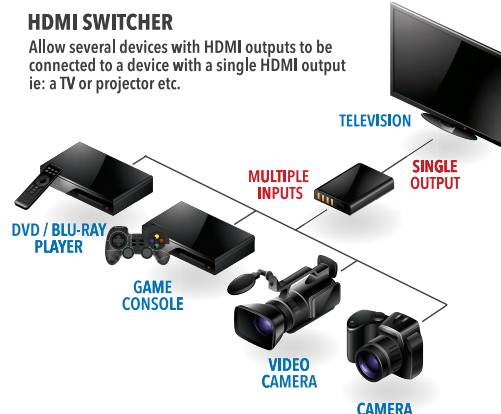
CAT.	Qty 1+	Qty 4+	Qty 10+
WC-7650	\$49.95	\$44.95	\$39.95

## Tech Talk: Splitters & Switches...What's The Difference?

A SPLITTER will connect one HDMI device to several HDMI devices. Perfect for connecting a Blu-Ray or DVD player to a couple of TVs...



A SWITCHER on the other hand allows you to choose between several inputs. For example connect your DVD player, Blu-Ray player, Gaming Console and a Camera to your HDMI TV and choose between them.





## HDMI SWITCHERS

### 3 WAY HDMI 1.3 SWITCHER

This is a simple switcher to connect 3-inputs (such as a Blu-ray player, media centre, etc) into one display (eg, a TV). No external power required, just connect and go! HDMI 1.3 compatible.

#### Features:

- Ultra-compact
- No external power supply required
- HDMI v1.3

SPECIFICATIONS	AC-1711
Input	3 x HDMI
Output	1 x HDMI
HDMI Standard	1.3
Video Supported	up to 1080p
Audio Supported	Dolby TrueHD, DTS-HD Master Audio
Power	By HDMI
Dimensions	51(W) x 51(D) x 15(H)mm



1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10
3 Input	AC-1711	\$19.95	\$17.95	\$15.95

### 2 WAY HDMI 1.4 BI-DIRECTION SWITCHER

This fantastic device solves all sorts of HDMI interconnection problems. Use it with one input and two outputs, or two inputs and one output. Plug your cables in, and away you go! Supports up to HDMI 1.4. Includes power supply.

#### Features:

- Compliant with HDMI 1.2, 1.3, and 1.4
- Works both ways (2 to 1, or 1 to 2)

SPECIFICATIONS	AC-1713
Input	2 x HDMI (Can switch to Output)
Output	1 x HDMI (Can switch to Input)
HDMI Standard	1.4
Video Supported	up to 4K@30Hz, 3D
Audio Supported	LPCM 7.1CH, Dolby TrueHD, DTS-HD Master Audio
Power	5VDC USB
Dimensions	66(D) x 55(W) x 20(H)mm



1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10
2 Input / 1 Output	AC-1713	\$49.95	\$44.95	\$39.95

### 3 WAY HDMI 1.4 SWITCHER WITH REMOTE CONTROL

Compact HDMI switchers for small to medium scale home theatre or gaming console setups. Using the one-touch button or the supplied remote control, you can switch your TV's display between a Blu-ray player, gaming console or other HDMI source with ease. Supports HDCP repeater functions, HDMI 1.4 at 4K, 2K resolutions, & also 3D video. Powered directly from HDMI so no external power supply is needed.

The IR receiver is on a 1.5m cable so you put the switcher at the back of the TV cabinet if required.

- Support: HDMI 1.4
- Resolutions: All resolutions up to 4K x 2K @ 30Hz
- Power: 0.2W
- Supported formats: PCM2, 5.1, 7.1CH, Dolby 5.1, DTS5.1, Dolby TrueHD, DTS-HD

4K UHD



1 YEAR WARRANTY

SPECIFICATIONS	AC-1705
Input	3 x HDMI
Output	1 x HDMI
HDMI Standard	1.4
Video Supported	up to 4K@30Hz, 3D
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD
Power	By HDMI
Dimensions	87(L) x 59(W) x 19(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
3 Input	AC-1705	\$39.95	\$35.95	\$31.95

### 3 WAY HDMI 2.0 SWITCHER WITH REMOTE CONTROL

High performance HDMI switchers with remote control. It supports all 3D TV formats in addition to all HDTV formats up to 4K x 2K. On top of that, the remote control gives complete control over the selection of sources and makes the device incredibly user friendly.

- Support smart auto switch
- IR and panel button control

1 YEAR WARRANTY



SPECIFICATIONS	AC-1760
Input	3 x HDMI
Output	1 x HDMI
HDMI Standard	2.0
Video Supported	up to 4K@30Hz, 3D
Audio Supported	LPCM 7.1CH, Dolby TrueHD, DTS-HD Master Audio
Power	5VDC (Mains adaptor included)
Dimensions	155(W) x 64(D) x 17(H)mm

4K UHD

	CAT.	Qty 1+	Qty 4+	Qty 10+
3 Input	AC-1760	\$69.95	\$62.95	\$55.95

### 4 WAY HDMI 2.0 SWITCHER WITH REMOTE CONTROL

Connecting all your new AV equipment together can be a chore. But this switcher will accept up to 4 HDMI inputs, and feed them to your flat-screen, projector, or any other HDMI display. Supporting 4K resolutions with HDMI 2.0, as well as transport of Dolby® / DTS® audio. Select inputs using the included remote control or with the pushbutton on the unit. Plug and play, and easy to use.



HDMI 2.0

SPECIFICATIONS	AC-1745
Input	4 x HDMI
Output	1 x HDMI
HDMI Standard	2.0
Video Supported	up to 4K@60Hz, 3D
Audio Supported	LPCM 7.1CH, Dolby TrueHD, DTS-HD Master Audio
Power	5VDC (Mains adaptor included)
Dimensions	128(W) x 75(D) x 20(H)mm

4K UHD

1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
4 Input	AC-1745	\$69.95	\$62.95	\$55.95

### 4 WAY HDMI 2.0B SWITCHER WITH HDR AND REMOTE CONTROL

Connect up to 4 HDR HDMI sources to one display (or another receiver). Supporting 4K HDR resolutions (12-bit), while also being compatible with lower resolutions. It includes a compact remote control for channel input selection. Stereo audio output is also provided for convenience. High Dynamic Range (HDR) equipment is becoming more affordable, for a premium colour depth and more lifelike colours. If you have HDR equipment, every component must be HDR compatible to gain the desired effect.

#### Features:

- 4 HDMI inputs
- HDMI and 3.5mm audio outputs
- Remote control included
- Up to 4K x 2K resolution



1 YEAR WARRANTY

SPECIFICATIONS	AC-1780
Input	4 x HDMI
Output	1 x HDMI
HDMI Standard	2.0b
Video Supported	Up to 4K@50/60Hz, 3D, HDR
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD, Dolby Atmos, DTS:X
Power	5VDC (Mains adaptor included)
Dimensions	121(W) x 79(D) x 16(H)mm

4K UHD

	CAT.	Qty 1+	Qty 4+	Qty 10
4 Channel HDR HDMI v2.0B	AC-1780	\$129.00	\$115.95	\$102.95

## HDMI SPLITTER

### 2 WAY HDMI SPLITTER WITH UHD 4K SUPPORT

- 3D HDMI 1.4a support
- 3D video support
- ESD protection
- HDCP 1.4 compliant



SPECIFICATIONS	AC-1710
Input	1 x HDMI
Output	2 x HDMI
HDMI Standard	1.4a
Video Supported	up to 4K@30Hz, 3D
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD
Power	5VDC (Mains adaptor included)
Dimensions	70(L) x 60(W) x 20(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
2 Output	AC-1710	\$49.95	\$44.95	\$39.95

### 4 WAY HDMI SPLITTER WITH UHD 4K SUPPORT

- 3D HDMI 1.4a support
- 3D video support
- HDCP 1.4 compliant



SPECIFICATIONS	AC-1712
Input	1 x HDMI
Output	4 x HDMI
HDMI Standard	1.4a
Video Supported	up to 4K@30Hz, 3D
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD
Power	5VDC (Mains adaptor included)
Dimensions	145(L) x 70(W) x 23(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
4 Output	AC-1712	\$99.95	\$89.95	\$79.95

### HDMI 2.0 UHD SPLITTERS

These HDMI UHD splitters with HDCP 2.2 are an advanced solution for splitting a single HDMI input to multiple HDMI outputs. They provide high performance audio and video output through HDMI cables up to 4K2K resolution and are capable of receiving and transmitting up to 9Gbps of bandwidth with no data loss. Supporting the latest features you can be assured of reliable and high quality HDMI distribution.



SPECIFICATIONS	AC-1766	AC-1768	AC-1769
Input	1 x HDMI	1 x HDMI	1 x HDMI
Output	2 x HDMI	4 x HDMI	8 x HDMI
HDMI Standard	2.0	2.0	2.0
Video Supported	Up to 4K @ 30Hz	Up to 4K @ 30Hz	4K @ 60Hz 3D
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD
Power	5VDC (Mains adaptor included)	5VDC (Mains adaptor included)	5VDC (Mains adaptor included)
Dimensions	96(W) x 56(D) x 17(H)mm	155(W) x 64(D) x 17(H)mm	235(W) x 84(D) x 17(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 Input 2 Output	AC-1766	\$69.95	\$62.95	\$55.95
1 Input 4 Output	AC-1768	\$119.00	\$106.95	\$94.95
1 Input 8 Output	AC-1769	\$199.00	\$178.95	\$158.95

### HDR HDMI SPLITTERS

Conveniently split your source components to drive two displays. With 4K resolution support there's no reduction in picture quality, so you can still enjoy the most your equipment has to offer. Includes audio support for up to 7.1 surround sound, and 4K resolutions up to 60Hz. Plug and play operation. Mains power adaptor included.

#### Features:

- Up to 4K2K @ 60Hz (4:4:4)
- Transmits up to 18Gbps with no data loss
- Built-in equaliser, retiming, and driver
- Smart EDID, STD (1080p), and TV (Copy OUT1) modes



SPECIFICATIONS	AC-1781	AC-1782
Input	1 x HDMI	1 x HDMI
Output	2 x HDMI	4 x HDMI
HDMI Standard	2.0b	2.0b
Video Supported	up to 4K@60Hz, 3D	up to 4K@60Hz, 3D
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD
Power	5VDC (Mains adaptor included)	5VDC (Mains adaptor included)
Dimensions	56(W) x 100(D) x 16(H)mm	63(W) x 163(D) x 16(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10
2 Output	AC-1781	\$89.95	\$80.95	\$71.95
4 Output	AC-1782	\$139.00	\$124.95	\$110.95

## HDMI SWITCHER SPLITTER

### 4 INPUT SWITCHER WITH DIGITAL & ANALOGUE AUDIO SPLITTER

A high performance HDMI switcher which allows fast changing between up to 4 HDMI sources such as an Xbox, media player, DVD player etc. Ideal for the home, retail service-scape, lecture halls or other venues where broad HDMI source compatibility is required. Features a TOSLINK and 3.5mm stereo audio socket that will output audio to an array of sound system setups.



SPECIFICATIONS	AC-1707
Input	4 x HDMI
Output	1 x HDMI
HDMI Standard	1.4a
Video Supported	up to 4K@30Hz, 3D
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD
Power	5VDC (Mains adaptor included)
Dimensions	146(L) x 70(W) x 24(H)

	CAT.	Qty 1+	Qty 4+	Qty 10+
4 Input	AC-1707	\$119.00	\$106.95	\$94.95

### 4 X 2 MATRIX SWITCHER SPLITTER WITH UHD 4K SUPPORT

Distribute up to four HDMI sources to 2 displays simultaneously. This will add a level of convenience for households that have two TVs but don't want to buy another set of Blu-ray players, set top boxes, etc. A single Blu-ray player connected to the matrix would output it's movie to two screens. This is also great for retail service scapes, shopping centres, reception areas and foyers. Has support for all resolutions up to UHD 4K x 2K as well as 3D support and EDID so switching sources will be fast with minimal interruption. An IR remote control for switching sources is supplied.



SPECIFICATIONS	AC-1714
Input	4 x HDMI
Output	2 x HDMI
HDMI Standard	1.4
Video Supported	up to 4K@30Hz, 3D
Audio Supported	PCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD
Power	5VDC (Mains adaptor included)
Dimensions	85(W) x 192(D) x 26(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
4 Input 2 Output	AC-1714	\$129.00	\$115.95	\$102.95

## HDMI Extenders

Converting your HDMI signal to use Cat5e or Cat6 cables provides a cost-effective method for running HDMI over long distances. Connect an adaptor at both ends of the Cat5e/Cat6 cable and everything operates normally.

### 1080P - 40M CAT5E / 50M CAT6 WITH INFRARED EXTENSION

This model also transmits IR signals through the Ethernet cable allowing you to use your remote controls when not in front of the transmitting unit such as a Blu-ray player. Both transmitter and receiver requires a 5VDC power supply (supplied).

- Embedded IR control path



SPECIFICATIONS	AC-1732
Range	Up to 40m (Cat5), 50m (Cat6)
HDMI Standard	1.3b
Video Supported	up to 1080p
Audio Supported	LPCM 7.1CH, Dolby TrueHD, DTS-HD Master Audio
Power	5VDC (Mains adaptor included)
Dimensions	100(L) x 65(W) x 25(H)mm

CAT.	Qty 1+	Qty 2+	Qty 4+
AC-1732	\$129.00	\$115.95	\$102.95

### 1080P - 50M CAT6 WITH INFRARED EXTENSION

Full audio support is included, with up to 7.1 surround sound. What's more is the infrared extension too, so you can take your remote control with you and still control the remote device. The transmitter module even includes HDMI passthrough, so you don't lose the original connection. Therefore this device acts like a splitter as well! The receiver also receives its power from the transmitter via the Cat6 cable, for even less hassle! Plug and play, mains power supply included.

- Also extends IR remote control
- Only transmitter requires mains power



SPECIFICATIONS	AC-1783
Range	Up to 50M (Cat6)
HDMI Standard	1.4b
Video Supported	up to 1080p@60Hz
Audio Supported	LPCM 7.1CH, Dolby TrueHD, DTS-HD Master Audio
Power	5VDC (Mains adaptor included)
Dimensions	80(D) x 69(W) x 18(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10
HDMI CAT 6 Extender 50m	AC-1783	\$149.00	\$133.95	\$118.95

### 1080P - TCP/IP 20M CAT5E / 100M CAT6 WITH INFRARED EXTENSION

This device makes use of the TCP/IP protocol used for computer networking, so you get the added bonus of being able to split a HDMI signal to multiple displays through a common home router or switch. (requires extra receivers available separately).

- Supports deep colour up to 12 bits, IR re-transmitting so remote controls can be used

See page 311 for suitable Cat5/Cat6 leads.



SPECIFICATIONS	AC-1734
Range	Up to 20m (Cat5e), 100m (Cat6)
HDMI Standard	1.3
Video Supported	up to 1080p
Audio Supported	LPCM 7.1CH, Dolby TrueHD, DTS-HD Master Audio
Power	5VDC (Mains adaptor included)
Dimensions	100(L) x 65(W) x 25(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
HDMI Extender	AC-1734	\$179.00	\$160.95	\$142.95
Spare TCP/IP-HDMI Receiver	AC-1735	\$99.95	\$89.95	\$79.95

### 1080P - 150M CAT6 WITH BIDIRECTIONAL INFRARED EXTENSION

Allows 1080p HDMI, bidirectional infrared remote control signals, RS-232 and DC power all to be sent over one Cat-6 straight through (network) cable to a distance of up to 150 metres - the longest range of all models!

- Power over cable
- Bi-directional infrared control



SPECIFICATIONS	AC-1746
Range	Up to 150m (Cat6)
HDMI Standard	1.4
Video Supported	up to 1080p@60Hz
Audio Supported	LPCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD, Dolby Atmos, DTS:X
Power	24VDC (Mains adaptor included)
Dimensions	115(W) x 65(D) x 17(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10
AC-1746	\$229.00	\$199.00	\$179.00

### 4K - CAT6 50M

Compatible up to HDMI 1.4, with up to 10.2Gbps bandwidth. It will also transmit the HDMI audio (if included), compatible with all standard HDMI audio including Dolby Digital and surround sound. HDCP 2.2 compliant for the latest support. No software required, simply connect everything up and go.



4K UHD

SPECIFICATIONS	AC-1737
Range	Up to 50M (Cat6)
HDMI Standard	1.4
Video Supported	up to 4K@30Hz, 3D
Audio Supported	LPCM to 7.1CH, Dolby & DTS5.1, Dolby TrueHD, DTS-HD, Dolby Atmos, DTS:X
Power	12VDC (Mains adaptor included)
Dimensions	88(W) x 61(D) x 17(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10
AC-1737	\$249.00	\$219.00	\$199.00

## HDMI REPEATERS

### USB POWERED HDMI REPEATER

Even with the best cables on the market, you can only get so far with HDMI. This active repeater unit will amplify the signal and extend the distance up to 35m! It supports up to 4K at 30Hz, and great features like HDCP passthrough for plug and play operation. It's powered by the HDMI source, and can be boosted using power from a USB port. A micro 700mm USB lead is included.

- Use a quality HDMI cable, no Cat5/Cat 6 cable required
- 20m range no power / 35m with power (via USB)
- HDCP passthrough - supports 3D & high definition



4K UHD



SPECIFICATIONS	AC-1703
Power	MicroUSB Cable
Dimensions	52(L) x 26(W) x 13(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1703	\$34.95	\$31.45	\$27.95

### HDMI 18GBPS REPEATER W/4K UP AND DOWN SCALING

Provides a signal boost for long cable runs, and will also scale up / down to and from 1080p and 4K, or simply pass through. Supports the latest HDCP and HDMI specifications. Mains power supply included.

- Supports up to 4K2K @ 60Hz, and HDMI digital audio formats



4K UHD



SPECIFICATIONS	AC-1728
HDMI Compliance	HDMI 2.0bHDCP Compliance: HDCP 2.2 and HDCP 1.4
Video Resolutions	up to 4K2K@50/60Hz(YUV4:4:4), 4K2K@30Hz, 1080P@120Hz, and 1080P 3D@60Hz
Color Space	10 or 12-bit - RGB, YCbCr 4:4:4, YCbCr 4:2:2
HDMI Audio Formats	(Pass-through) LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio
USB	1 x Mini-USB (firmware upgrade only)
Dimensions	81(W) x 55(D) x 16(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10
HDMI 18Gbps Repeater	AC-1728	\$149.00	\$133.95	\$118.95




## HDMI CONVERTERS

### HDMI TO AV COMPOSITE CONVERTER

Convert your digital HDMI signal to a standard composite audio/video signal. This is very handy for adapting a DVD player or gaming console to an older TV, since many of these new devices no longer offer analogue outputs. Supports PAL and NTSC standards. USB cable and power supply included to provide power to the unit.



**1 YEAR WARRANTY**

<b>SPECIFICATIONS</b>	<b>AC-1773</b>			
<b>Input Video Signal</b>	HDMI			
<b>Output Video Signal</b>	Composite RCA			
<b>Display Adjust</b>	No			
<b>HDMI Input Resolution</b>	640 x 480, 800 x 600, 1024 x 768, 1280 x 720, 1280 x 1024, 1360 x 768, 1600 x 1200, 1920 x 1080, 480i/p, 576i/p, 720p, 1080i/p			
<b>HDMI</b>	1.3			
<b>HDCP Support</b>	Yes (on input side)			
<b>Supported TV Standard</b>	PAL/NTSC M.(NTSC-J)			
<b>Power</b>	USB power adaptor and lead included			
<b>Dimensions</b>	67(W) x 21(H) x 57(D)mm			
	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 4+</b>	<b>Qty 10+</b>
	AC-1773	\$69.95	\$62.95	\$55.95



### HDMI TO AV COMPOSITE CONVERTER WITH DISPLAY ADJUST

The converter also supports either NTSC or PAL systems. This converter provides high quality output image, and features an easy to use zoom function which allows you to adjust your display size to suit different configurations. Supports a wide range of resolutions ideal for using newer devices with existing legacy displays.

- Screen size adjustment button



**1 YEAR WARRANTY**

<b>SPECIFICATIONS</b>				
<b>Input Video Signal</b>	HDMI			
<b>Output Video Signal</b>	Composite RCA (CBVS/Composite video & 2 RCA audio)			
<b>Display Adjust</b>	Yes			
<b>HDMI Input Resolution</b>	800 x 600, 1024 x 768x 1280 x 720, 1280 x 1024, 1920 x 1080			
<b>HDMI</b>	1.3			
<b>HDCP Support</b>	Yes (on input side)			
<b>Supported TV Standard</b>	PAL/NTSC			
<b>Power</b>	5V power supply included			
<b>Dimensions</b>	115(W) x 100(S) x 25(H)mm			
				
		<b>WARRANTY</b>		
	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 4+</b>	<b>Qty 10+</b>
	AC-1720	\$129.00	\$115.95	\$102.95

### COMPOSITE AV TO HDMI CONVERTER

A universal converter for analogue composite input to HDMI 1080p (60Hz). The analogue to digital conversion module will deliver a sharp and realistic image thanks to its processing technology. Power is delivered to the unit through the mini USB port. Enable old devices such as Sega master systems, DVRs, or VHS players to playback video and audio on more modern HDMI equipped displays.

- Supports HDMI 1080p 60Hz / 720p 60Hz output
- Requires 5VDC power through the mini USB port (power supply included)



**1 YEAR WARRANTY**

SPECIFICATIONS		AC-1722			WARRANTY
Input	Composite video and L/R Analogue audio (Yellow/White/Red RCA)				
Composite Input	PAL/NTSC3.58/NTSC4.43/SECAM/PAL-M/PAL-N				
Output	HDMI				
Dimensions	60(W) x 54(L) x 20(H)mm				
Weight	80g				
		CAT.	Qty 1+	Qty 4+	Qty 10+
		AC-1722	\$84.95	\$76.50	\$67.95

### COMPOSITE AUDIO VIDEO TO HDMI 4K UPSCALER CONVERTER

The AV to HDMI 4K Upscaler Converter is a universal converter for analogue composite input to HDMI 4Kx2K@60Hz output. The analogue to digital conversion in this module employs 10 bits maximal 297MSPS sampling, black/white level expansion, colour transition improvement, dynamic range expansion, blue stretch, auto-detect and auto-convert the composite signal to HDMI output. Making video come alive, delivering the sharpest, most realistic HD visuals available. Supplied with a 5VDC, 1A mains power adaptor.

- No installation driver required
- Flexible and portable
- Provide advanced signal processing with great precision, colours & resolution



**4K UHD**

**1 YEAR WARRANTY**

<b>SPECIFICATIONS</b>	<b>AC-1776</b>								
<b>Input Ports</b>	1 x RCA (Yellow, White, Red), 1 x S-Video, 1 x Mini USB								
<b>Output</b>	1 x HDMI								
<b>CVBS/S-VIDEO Input</b>	PAL,NTSC3.58,NTSC4.43,SECAM,PAL/M,PAL/ N standard TV formats								
<b>HDMI Output Resolution</b>	4Kx2K@60Hz,4Kx2K@30Hz, 1080p@60Hz,720p@60Hz								
<b>Dimensions</b>	93(D) x 84(W) x 28(H)mm, 300g								
	<table><tr><th>CAT.</th><th>Qty 1+</th><th>Qty 4+</th><th>Qty 10+</th></tr><tr><td>AC-1776</td><td>\$149.00</td><td>\$133.95</td><td>\$118.95</td></tr></table>	CAT.	Qty 1+	Qty 4+	Qty 10+	AC-1776	\$149.00	\$133.95	\$118.95
CAT.	Qty 1+	Qty 4+	Qty 10+						
AC-1776	\$149.00	\$133.95	\$118.95						

### MHL TO HDMI CONVERTER WITH 11 PIN SAMSUNG® ADAPTOR

Mobile High-Definition Link (MHL) is a feature built into popular Smartphone and Tablet devices, which enables full HD 1080p video output from the Micro-B USB port. Connect this MHL to HDMI Converter to your HDTV (HDMI cable not included) to view full 1080p video at 30/60Hz or mirror everything on and from your MHL equipped device. Supplied with an 11 Pin Micro-B Adaptor. Requires power via USB, power cable available separately.

- Supports resolutions up to 1080p @ 30/60Hz
- Supports device mirroring & most Android Smartphones & Tablets
- Lead Length: 90(L)mm
- Dimensions: 53(L) x 28(W) x 11(H)mm



**1 YEAR WARRANTY**

CAT.	Qty 1+	Qty 4+	Qty 10+
WQ-7424	\$24.95	\$22.35	\$19.70

### HDMI TO VGA + STEREO AUDIO CONVERTER

Convert a HDMI source such as a Blu-ray player to a VGA display. This unit will also convert the audio stream from HDMI to analogue audio which can be output to some speakers or headphones using the 3.5mm audio socket. No power supply is required as it's powered by the HDMI signal.



<b>SPECIFICATIONS</b>	<b>AC-1724</b>			
<b>HDMI Input Formats</b>	480p, 576p, 720p, 1080p			
<b>VGA Video Output Format</b>	480p (720 x 480), 576p (720 x 576), 720p (1280 x 720), 1080p (1920 x 1080)			
<b>Frequency</b>	50/60Hz			
<b>Cable Length</b>	175mm			
<b>Dimensions</b>	55(L) x 41 (W) x 17(H)mm			
<div><div></div><div><b>1</b> YEAR</div></div>				
WARRANTY				
	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 4+</b>	<b>Qty 10+</b>
	AC-1724	\$29.95	\$26.95	\$23.95

**1 YEAR WARRANTY**

### HDMI TO VGA AND STEREO AUDIO CONVERTER

This is a tiny and handy unit, barely bigger than a USB flash drive. It will convert your HDMI output to VGA and stereo audio outputs. A common problem is an older projector or screen in a board room with VGA, and a newer laptop with only a HDMI output. This adaptor solves it quickly and easily, supporting resolutions up to 1080p Full HD! Plug and play operation, no drivers required.

- No power required
- Plug and play
- Supports up to 1080p HD
- HDMI V1.4
- Dimensions: 50(D) x 30(W) x 15(H)mm

**1 YEAR WARRANTY**



CAT.	Qty 1+	Qty 4+	Qty 10
AC-1784	\$39.95	\$35.95	\$31.95

## ✓ HDMI CONVERTERS (CONTINUED)

### VGA TO HDMI CONVERTER & UPSCALER WITH STEREO AUDIO

This unit is ideal for older laptops and other devices with a VGA output, to display on a HDMI device. It also allows conversion of your analogue audio source into the HDMI digital stream. It's effectively plug and play. Power is provided by the 700mm mini USB cable supplied.

- HDMI upscaling up to 1080p
- Analogue audio encoding
- HD HDMI output



SPECIFICATIONS	AC-1718
Power	5VDC, 500mA
Input	VGA, RCA (AUDIO)
Output	HDMI
DTV/HDTV	480i/576i/480p/576p/720p/1080i/1080p
Video Amplifier Bandwidth	1.65Gbps/165MHz
Vertical Frequency Range	50/60Hz
Power Consumption(MAX)	5W
Weight	43g
Dimensions	60(L) x 54(W) x 20(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1718	\$89.95	\$80.95	\$71.95

### 4K HDMI TO VGA & STEREO AUDIO CONVERTER

Convert digital 4K UHD HDMI video and audio signal from your Blu-ray player or computer to standard VGA and RCA stereo audio signal for connection with your older style CRT/LED/LED monitors or projectors.

- No installation driver required
- Flexible and portable
- High quality scaling technology for input resolutions
- Multiple output resolution setting in OSD menu
- Compatible with HDMI1.4
- Support HDMI input resolution up to 4K x 2K@30Hz



CAT.	Qty 1+
AC-1770	\$99.95

### VGA & RCA AUDIO TO HDMI 4K UPSCALER CONVERTER

The VGA to HDMI upscaler converter is a universal converter for analogue VGA input to HDMI 4K x 2K@60Hz output. The analogue to digital conversion in this module employs 10 bits maximal 297MSPS sampling, black/white level expansion, colour transition improvement, dynamic range expansion, blue stretch, auto-detect and auto-convert the VGA signal to HDMI output. It allows making the video come alive, delivering the sharpest and most realistic HD visuals. Supplied with a 5VDC, 1A mains power adaptor.

- No installation driver required
- Flexible and portable
- Advanced signal processing with great precision, colours, resolution and details



SPECIFICATIONS	AC-1774
Input Ports	1 x VGA, 1 x Earphone, 1 x mini USB
Output	1 x HDMI
VGA Input Resolution	640 x 480p @ 60Hz, 800 x 600 @ 60Hz, 1024 x 768p @ 60Hz, 1280 x 720p @ 60Hz, 1280 x 768p @ 60Hz, 1280 x 1024p @ 60Hz, 1360 x 768p @ 60Hz, 1920x 1080p @ 60Hz.
HDMI Output Resolution	4Kx2K @ 60Hz, 4Kx2K @ 30Hz, 1080p @ 60Hz, 720p @ 60Hz
Power Consumption (Max)	3W
Dimensions	93(D) x 84(W) x 28(H)mm, 300g

CAT.	Qty 1+
AC-1774	\$99.95

**Monthly Specials and Promotions:**  
Lookout for our monthly promotions in store and online.

## 2 X HDMI TO VGA/COMPONENT & ANALOGUE/DIGITAL AUDIO CONVERTER

No need to upgrade to expensive LCDs or plasmas just yet. This converter can accept 2 HDMI sources, and features a switch to select which device you want to output. Connect HDMI signals from DVD, Blu-ray or set top boxes and output to VGA, component video, with digital (TOSLINK) or analogue (3.5mm stereo) audio outputs for connection to almost any TV or PC monitor. Supports resolutions up to 1080p; output resolution is determined by input.

- Supports NTSC and PAL systems
- HDCP Support
- HDMI 1.3 compliant



SPECIFICATIONS	AC-1721
Input	2 x HDMI
Video Output	1 x YPbPr / 1 x VGA
Audio Output	1 x TOSLINK / 1 x 3.5mm Stereo
Supported Resolutions	HDMI Input: up to 1080p, VGA Output: up to 1080p @ 60Hz, YPbPr Output: up to 1080p @ 50Hz / 60Hz, 5VDC Power Supply included
Dimensions	34(H) x 128(W) x 94(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AC-1721	\$149.00	\$133.95	\$118.95

## ✓ HDMI AUDIO EXTRACTORS

### HDMI AUDIO EXTRACTOR

This unit provides a powerful utility - grabbing the audio from a HDMI cable. Why would you want to do this? Quality and simplicity. Since HDMI has taken over as the go-to standard, less and less devices provide digital audio outputs. This is especially true for a cheap Blu-ray player, laptop computer, or other compact device. Using this device you can extract high quality audio in digital optical, digital coaxial, or analogue 3.5mm stereo audio. Suitable for use with digital A/V signals up to 4k @ 60Hz, it's going to solve many connectivity issues for external speakers. What's more is it provides HDMI back out, so you can still feed the video to your TV or other display! Compatible with HDMI 2.0, HDCP 2.2 compliant.

#### Features:

- Extracts audio stream from HDMI
- Suitable up to 4k2k @ 60Hz
- Supports: DTS HD, Dolby TrueHD (via HDMI)



SPECIFICATIONS	AC-1739
Input	1 x HDMI
Video Output	1 x HDMI
Audio Outputs	1 x Optical, 1 x Coaxial, 1 x 3.5mm Stereo
Video Format	4k2k @ 60Hz
Power	5VDC @ 1A
Weight	24g
Dimensions	175(W) x 135(D) x 65(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10
AC-1739	\$89.95	\$80.95	\$71.95



### Smart Hardware Competition: - DANEL BENNETT, SHOPS AT JAYCAR SMITHFIELD

"Was built to have laser lights reflect back to a uno board for a client of mine in parramatta. They run a amusement Center and needed a game that had laser lights to activate certain things in the rooms"

## REMOTE CONTROLS

### TOTAL CONTROL 1 TV BIG BUTTON REMOTE

Finally, an old school TV remote control with only the buttons that you really need, and they are big visible buttons too! There's no need to navigate through a touch screen or download codes via a computer as it is preloaded with codes for all the major brand TVs - and a whole heap of the more obscure brands as well! Easy setup instructions are included and it can operate up to 2 different devices.

- Ideal for the elderly
- Requires 2 x AAA batteries
- Approx 175mm long



CAT.	Qty 1+	Qty 4+	Qty 10
AR-1962	\$29.95	\$26.95	\$23.95

See page 469 for our universal air conditioner remote control.

### TOTAL CONTROL 1 TV REMOTE

A single remote for a single TV. If you find yourself confused by all the multi-function remotes on the market, then this one is for you. Nothing could be simpler!

- Requires 2 x AAA batteries
- Approx 178mm long



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
1 Device	AR-1955	\$29.95	\$26.95	\$23.95

### TOTAL CONTROL 8 DEVICE REMOTE

Control up to 8 different devices including televisions, satellite receivers, set top boxes, DVD players VCRs, PVRs and more with this easy to use pre-programmed remote. It is compatible with most popular brands and features just about all the buttons you will ever need.

- Requires 2 x AAA batteries
- Approx 178mm long



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
8 Devices	AR-1954	\$39.95	\$35.95	\$31.95

## Replacement Remotes:

There's something about the design consideration given to original remote controls that isn't always replicated with universal units. With these replacement units, they closely replicate all the original functionality and are virtually drop-in replacements. No setup required, just insert your batteries and you're ready to go. Note: Some features may not be available on your particular TV, such as record / playback.

- Requires 2 x AAA batteries

**LG® TV'S** CAT. AR-1958

**SAMSUNG® TV'S** CAT. AR-1959

**SONY TV'S** CAT. AR-1960

**PANASONIC TV'S** CAT. AR-1961

**HISENSE TV'S** CAT. AR-1964



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
LG®	AR-1958	\$59.95	\$53.95	
Samsung®	AR-1959	\$59.95	\$53.95	
	CAT.	Qty 1+	Qty 4+	Qty 10+
Sony <b>NEW</b>	AR-1960	\$59.95	\$53.95	\$47.95
Panasonic <b>NEW</b>	AR-1961	\$59.95	\$53.95	\$47.95
Hisense <b>NEW</b>	AR-1964	\$59.95	\$53.95	\$50.95



LG  
AR-1958



SAMSUNG  
AR-1959



SONY  
AR-1960



PANASONIC  
AR-1961



HISENSE  
AR-1964

Phone support is available from the vendor if you are unable to find the right code to suit your device. The phone number is printed on the packaging.

Shop online for your Jaycar Electronics products and check out our latest products and promotions on our website.

### REMOTE CONTROL FOR RECORDABLE DIGITAL PAY TV

Replace your lost or broken pay TV remote control at a fraction of the cost of the genuine brand names, or just keep a spare. Including buttons to control the special record, live pause and playback features of the latest recordable digital Pay TV services, you will have complete control over your Recordable Pay TV subscription.

- Compatible with recordable pay TV set top boxes
- Operates all TV essential functions
- Includes controls for record, live pause & playback features
- Requires 2 x AA Batteries
- Approx 210mm long



WARRANTY

Not available in New Zealand.

	CAT.	Qty 1+	Qty 4+	Qty 10+
Australia	AR-1737	\$19.95	\$17.70	\$15.70

### REMOTE CONTROL FOR SKY TV NZ

The dog chewed on it, the baby slobbered on it, or it just stopped working. Whatever the reason your Sky satellite remote stopped working, this one is a direct replacement. Suitable for use with Sky and MySky HDi boxes.

- Controls TV and Sky
- Compatible with Sky and MYSKY HDi
- Infrared Learning
- Requires 2 x AA Batteries
- Approx 190mm long



WARRANTY

Not available in Australia.

	CAT.
	AR-1957

Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)



## REMOTE CONTROLS (CONTINUED)

### UNIVERSAL REMOTE CONTROL FOR AIR CONDITIONERS WITH BACKLIT LCD

A feature rich replacement for a lost or broken air-con remote. The unit has an easy to read blue backlit LCD for night control and all the buttons you'll need to control most functions of your air conditioner. Standard temperature controls, swing, vane, fan, timer, sleep mode and more are all featured on the control. This unit is compatible with most air conditioners capable of identifying with up to 2000 models. It also conveniently shows the time.

- Requires 2 x AAA batteries
- Includes mountable cradle
- Dimensions: 165(L) x 55(W) x 25(D)mm



### WI-FI UNIVERSAL SMART REMOTE

Many electrical appliances such as TVs, air conditioners, heaters, and so on are still controlled using an infrared remote control. As more and more people are using their smart device to control pretty much everything, the RM Mini 3 allows you to control these infrared signals from your smartphone or tablet.

The RM Mini 3 connects via Wi-Fi and allows you to control infrared appliances with Android or iOS smartphones or tablets. You can remotely control multiple appliances from your smartphone anywhere in the world. With the recent additions of Google assistant and Alex voice controls now you can control your appliances via voice commands with help from the RM Mini 3.

- Supported OS: iOS 7.0/Android 4.0 and above
- Wi-Fi Frequency: 2.4GHz 802.11b/g/n
- Power Input: 5V DC/500mA
- Max. Voltage: AC 240V
- Max. Current: 2A
- Standard Power: ≤0.85W
- Infrared Direction: 360° (Horizontally)



amazon alexa

CAT.	Qty 1+	Qty 4+	Qty 10+
AR-1731	\$24.95	\$22.35	\$19.70

CAT.	Qty 1+	Qty 2+	Qty 4+
AR-1974	\$39.95	\$35.95	\$47.90

## INFRARED (IR) EXTENDERS

### USB IR EXTENDER KIT

Easy to set up plug and play USB powered IR extender kit allows you to control AV devices behind closed doors or cabinets. Simply plug the USB into an available port of one of your AV devices and this feeds the power required for the attached IR receiver and transmitter. The multiple sensors inside the transmitter enable it to work effectively from a wide range of positions in front of your source product. This kit supports wide reception and the receiver range is up to 10 metres. Also works with multiple remote controls.



CAT.	Qty 1+	Qty 2+	Qty 4+
AR-1834	\$24.95	\$22.45	\$19.95

### IR EMITTER KIT

Use it to extend the range of your IR remote control to another room, or run all your remote controlled devices from a single sensor. This IR Emitter Kit acts like a hub, enabling you to interface all your IR remote controlled devices together and control them from a single sensor point. Up to six IR emitters to be connected to a single point and you can add extra emitters as you need.



	CAT.	Qty 1+	Qty 2+	Qty 4+
2 Input IR Extender	AR-1812	\$79.95	\$71.95	\$63.95
Spare Emitters - Single	AR-1811	\$7.95	\$6.95	\$6.25
Spare Emitters - Dual	AR-1813	\$9.95	\$8.75	\$7.75
Spare IR Receiver	AR-1819	\$24.95	\$22.35	\$19.70

### FOXTEL® IQ2 COMPATIBLE IR REMOTE CONTROL EXTENDER

Allows you to control your video source devices like set top boxes, a Blu-ray/DVD player, or even a HDMI switcher from another room. For those situations where you have a source transmitting to one or more TVs in different rooms. There is a receiver which plugs into the source device and a transmitter which picks up a signal from your remote control and relays it to the receiver.



SPECIFICATIONS	AR-1827
IR Receiving Range	>8m
Foxtel® IQ2 Compatible	Yes
Transmission Range	Up to 50m in clear sight
Carrier Frequency	433.92MHz
Power Supply	9VDC/150mA
Dimensions	70(L) x 50(W) x 20(H)mm

CAT.	Qty 1+	Qty 2+	Qty 4+
AR-1827	\$54.95	\$49.45	\$43.90

### 4 CHANNEL COMPACT INFRARED EXTENDER KIT

Some aesthetically pleasing home theatre setups may not be 100% functional. AV source devices may be hidden in a cabinet to create a clean minimalistic setup. In these scenarios, the signal from your remote control may be partially or completely blocked. To overcome this you can use this IR repeater extender kit to give you control of your devices. Plug the IR receiver in (to receive signals from your remote), then connect up to 4 devices to the emitter outlets. The 3M adhesive backing on the IR receiver the emitters can be mounted in an unobtrusive location. The kit is 4 channel so will accept up to 4 source devices.

The IR repeater unit includes:

- 2 x Dual IR emitter cables included
- 1 x IR receiver cable
- 1 x Mains plugpack
- 1 x Repeater/Extender
- Mounting holes & screws
- Cable length: 3m
- Dimensions: 03(L) x 32(W) x 16.5(H)mm



CAT.	Qty 1+	Qty 2+	Qty 4+
AR-1828	\$59.95	\$53.95	\$47.90

### BIDIRECTIONAL IR EXTENDER OVER CAT5E - 100M

Control AV equipment remotely from either the source or receiver that are up to 100m apart. You could, for example, change the media playing on a DVD player in another room whilst standing in front of the TV, or control the TV volume from the room with the media player. Suitable for domestic and commercial applications including digital signage, demo stations or video conferencing etc, and features wide band IR circuitry to suit modern PayTV remote controls. The kit includes two extenders with IR LED on a 3m lead, and a mains power adaptor. All you need is standard Cat5e UTP network cable.

- Bi-directional IR path
- 2 x IR emitter output connections
- Single power supply on either TX or RX unit
- Each device can be TX or RX



SPECIFICATIONS	AR-1809
IR Frequency Range	30kHz to 60kHz
IR Lead Length	3 metres
Power	12V/200mA (Mains adaptors inc)
Dimensions	75(L) x 64(W) x 29(H)mm
Weight	28g



CAT.	Qty 1+	Qty 2+	Qty 4+
AR-1809	\$84.95	\$76.45	\$67.95



To check if your local store has stock visit our website, click to place your order and collect in-store within 2 hours.

## Audio Leads:

All the leads shown on this page are packaged in attractive hanging storage blister display packs except where indicated.

**5 PIN DIN PLUG TO  
5 PIN DIN PLUG**



WA-7000

**3.5MM MONO PLUG TO  
3.5MM MONO PLUG**



WA-7006

**2.5MM STEREO PLUG TO  
3.5MM STEREO PLUG**



WA-7004

**3.5MM STEREO PLUG TO  
3.5MM STEREO PLUG**



WA-7004/05

**SLIM 3.5MM  
STEREO LEAD**



WA-7500

**3.5MM STEREO PLUG TO  
3.5MM STEREO SOCKET**



WA-7010

**SLIM 3.5MM STEREO PLUG TO  
2 X 3.5MM SOCKET**



WA-7504

**3.5MM STEREO PLUG TO  
2 X RCA PLUGS**



WA-7014/17

**SLIM 3.5MM STEREO PLUG TO  
2 X RCA PLUG LEAD**



WA-7502

**3.5MM STEREO PLUG TO  
2 X RCA SOCKETS**



WA-7016

**3.5MM STEREO SOCKET TO  
2 X RCA PLUGS**



WA-7018

**6.5MM MONO PLUG TO  
6.5MM MONO R/A PLUG**



WA-7024

**6.5MM MONO PLUG TO  
6.5MM MONO SOCKET**



WA-7030

**6.5MM MONO PLUG TO  
3 PIN XLR SOCKET**



WA-7040

**3 PIN XLR TYPE PLUG TO  
3 PIN XLR SOCKET**



WA-7041/43

**RCA PLUG TO  
RCA PLUG**



WA-7050

**RCA PLUG TO  
2 X RCA PLUGS**



WA-7054

**2 X RCA PLUGS TO  
2 X RCA SOCKETS**



WA-7070/74

**RCA PLUG TO  
2 X RCA SOCKETS**



WA-7056

**1 X RCA SOCKET TO  
2 X RCA PLUGS**



WA-7058

CONNECTOR 1	CONNECTOR 2	LENGTH	QUALITY	CAT.	QTY 1+	QTY 4+	QTY 10+
5 Pin DIN plug	5 Pin DIN Plug	1.5m	Good	WA-7000	\$6.95	\$6.25	\$5.50
Mono 3.5 Plug	Mono 3.5 Plug	1.5m	Good	WA-7006	\$4.95	\$4.45	\$3.90
Stereo 2.5 Plug	Stereo 3.5 Plug	1.5m	Good	WA-7004	\$4.95	\$4.45	\$3.90
Stereo 3.5 Plug	Stereo 3.5 Plug	0.5m	Good	WA-7007	\$4.50	\$3.95	\$3.60
Stereo 3.5 Plug	Stereo 3.5 Plug	1.5m	Good	WA-7008	\$4.95	\$4.45	\$3.90
Stereo 3.5 Plug	Stereo 3.5 Plug	3.0m	Good	WA-7009	\$8.50	\$7.50	\$6.75
Stereo 3.5 Plug	Stereo 3.5 Plug	5.0m	Good	WA-7005	\$9.95	\$8.75	\$7.75
Stereo 3.5 Plug	Stereo 3.5 Plug	2.0m Slim	Good	WA-7500	\$9.95	\$8.75	\$7.75
Stereo 3.5 Plug	Stereo 3.5 Socket	3.0m Curly	Good	WA-7010	\$6.95	\$6.25	\$5.50
Stereo 3.5 Plug	Stereo 3.5 Socket	0.2m Slim	Good	WA-7011	\$9.95	\$8.75	\$7.75
Stereo 3.5 Plug	2 x Stereo 3.5 Sockets	3.0m Curly	Good	WA-7504	\$9.95	\$8.75	\$7.75
Stereo 3.5 Plug	RCA x Plug	1.5m	Good	WA-7014	\$6.50	\$5.75	\$4.95
Stereo 3.5 Plug	RCA x Plug	3.0m	Good	WA-7015	\$8.95	\$7.95	\$6.95
Stereo 3.5 Plug	RCA x 2 Plug	5.0m	Good	WA-7017	\$9.95	\$8.75	\$7.75
Stereo 3.5 Plug	RCA x 2 Plug	2.0m Slim	Good	WA-7502	\$12.95	\$11.35	\$10.35
Stereo 3.5 Plug	RCA x 2 Socket	300mm	Good	WA-7016	\$5.50	\$4.90	\$4.30
Stereo 3.5 Socket	RCA x 2 Plug	300mm	Good	WA-7018	\$5.50	\$4.90	\$4.30
Mono 6.5 Plug	Mono 6.5 R/A	3.0m	Good	WA-7024	\$6.95	\$6.25	\$5.50
Mono 6.5 Plug	Mono 6.5 Socket	5.0m	Good	WA-7030	\$8.95	\$7.95	\$6.95
Mono 6.5 Plug	XLR 3 Pin Socket	6.0m	Good	WA-7040	\$19.95	\$17.95	\$15.95
XLR 3 Pin	XLR 3 Pin Socket	2.0m	Best	WA-7041	\$11.95	\$10.70	\$9.50
XLR 3 Pin	XLR 3 Pin Socket	6.0m	Best	WA-7042	\$19.95	\$17.95	\$15.95
XLR 3 Pin	XLR 3 Pin Socket	10.0m	Best	WA-7043	\$29.95	\$26.95	\$23.95
RCA Plug	RCA Plug	1.5m	Good	WA-7050	\$5.95	\$5.25	\$4.75
RCA Plug	RCA x 2 Plug	1.5m	Good	WA-7054	\$5.95	\$5.25	\$4.75
RCA Plug x 2 Plug	RCA x 2 Socket	1.5m	Good	WA-7070	\$6.50	\$5.75	\$4.95
RCA Plug x 2 Plug	RCA x 2 Socket	3.0m	Good	WA-7072	\$9.95	\$8.75	\$7.75
RCA Plug x 2 Plug	RCA x 2 Socket	5.0m	Good	WA-7074	\$11.95	\$10.70	\$9.50
RCA Plug	RCA x 2 Socket	300mm	Good	WA-7056	\$4.95	\$4.45	\$3.90
RCA Socket	RCA x 2 Plug	300mm	Good	WA-7058	\$4.95	\$4.45	\$3.90

## AUDIO LEADS

2 X RCA PLUGS TO 2 X RCA PLUGS



WA-7062/68

PIGGYBACK 2 X RCA TO RCA LEAD



WA-7090/91

RCA PLUG TO RCA SOCKET



WA-7084

RCA PLUG TO 3.5MM MONO PLUG



WA-7088

4 X RCA PLUGS TO 4 X RCA PLUGS



WA-7078

SPEAKON AUDIO LEADS



WA-7100/02

6.5MM MONO TO SPEAKON CABLE



WA-7108

SPEAKON LEAD EXTENDER



PA-3689

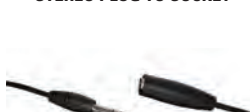
### SPEAKON CABLES

The standard for speaker connections in PA & sound reinforcement. Buy the cable & connectors and put them together, or buy these excellent ready-made cables.

CONNECTOR 1	CONNECTOR 2	LENGTH	QUALITY	CAT.	Qty 1+	Qty 4+	Qty 10+
RCA x 2 Plug	RCA x 2 Plug	1.5m	Good	WA-7062	\$6.95	\$6.25	\$5.50
RCA x 2 Plug	RCA x 2 Plug	3.0m	Good	WA-7064	\$8.95	\$7.95	\$6.95
RCA x 2 Plug	RCA x 2 Plug	5.0m	Good	WA-7066	\$10.95	\$9.75	\$8.75
RCA x 2 Plug	RCA x 2 Plug	10.0m	Good	WA-7068	\$13.95	\$12.35	\$10.95
RCA x 2 Piggyback	RCA x 2 Plug	1.5m	Good	WA-7090	\$9.95	\$8.75	\$7.75
RCA x 2 Piggyback	RCA x 2 Plug	3.0m	Good	WA-7091	\$11.95	\$10.70	\$9.50
RCA Plug	RCA Socket	3.0m	Good	WA-7084	\$6.50	\$5.75	\$4.95
RCA Plug	Mono 3.5 Plug	1.5m	Good	WA-7088	\$4.95	\$4.45	\$3.90
RCA x 4 Plug	RCA x 4 Plug	1.5m	Good	WA-7078	\$8.50	\$7.50	\$6.75
Speakon Plug	Speakon Plug	5.0m	Good	WA-7100	\$29.95	\$26.95	\$23.95
Speakon Plug	Speakon Plug	10.0m	Good	WA-7102	\$44.95	\$40.45	\$35.90
Speakon Plug	6.5mm Plug	3.0m	Good	WA-7108	\$16.95	\$14.95	\$13.35
Speakon Socket Extender				PA-3689	\$12.95	\$11.35	\$10.35

## INSTRUMENT LEADS

CURLY INSTRUMENT EXTENSION LEAD 6.5MM STEREO PLUG TO SOCKET



WA-7046

CURLY INSTRUMENT LEAD 6.5MM MONO PLUG TO PLUG



WA-7026

INSTRUMENT LEAD 6.5MM STEREO PLUG TO PLUG



WQ-7291

AMPHENOL INSTRUMENT CABLE



WQ-7290

AMPHENOL BALANCED MICROPHONE CABLE



WQ-7292/96

CONNECTOR 1	CONNECTOR 2	LENGTH	QUALITY	CAT.	Qty 1+	Qty 4+	Qty 10+
Stereo 6.5mm Plug	Stereo 6.5mm Socket	6.0m Culy	Good	WA-7046	\$10.95	\$9.85	\$8.75
Mono 6.5mm Plug	Mono 6.5mm R/A Plug	6.0m Curly	Good	WA-7026	\$11.95	\$10.70	\$9.50
Mono 6.5mm Plug	Mono 6.5mm R/A Plug	6.0m	Best	WQ-7290	\$34.95	\$31.45	\$27.90
Stereo 6.5mm Plug	Stereo 6.5mm Plug	6.0m	Best	WQ-7291	\$34.95	\$30.95	\$27.95
XLR Plug	XLR Socket	6.0m	Best	WQ-7292	\$44.95	\$40.45	\$35.90
XLR Plug	XLR Socket	9.0m	Best	WQ-7296	\$49.95	\$44.95	\$39.95

## CABLE TESTER

### ROADIES CABLE TESTER

Simply plug the cable under test and turn the rotary switch. The LED array gives you an instant go/no-go status of each conductor path in the cable. With bullet-proof allmetal construction, it's ideally suited to the ruff and tumble world of rock 'n' roll, but is also suitable for any technician working with cables. Faster and much easier than a multimeter. Requires 1 x 9V battery. (use SB-2423)

Tests the following cables:

- Speakon 4, 8P
- 1/4" mono & TRS
- DIN 3, 5, 7, 8P
- XLR 3, 5P
- Phono (RCA)
- USB
- RJ45
- Dimensions: 190(L) x 98(W) x 35(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-0405	\$79.95	\$71.95	\$63.95



1 YEAR WARRANTY



## VIDEO LEADS

**3 X RCA PLUGS  
TO 3 X RCA PLUGS**



WV-7316/21

**3.5MM 4 CONTACT PLUG  
TO 3 X RCA PLUGS**



WV-7345

**S-VIDEO 4 PIN MINI  
DIN PLUG TO PLUG**



WV-7336

**SCART PLUG TO 6  
X RCA**



WV-7342

**3 RCA PIGGYBACK PLUGS  
TO 3 X RCA PLUGS**



WV-7324

**BNC PLUG  
TO BNC PLUG**



WV-7300

**RCA PLUG  
TO RCA PLUG**



WV-7304/06

**RCA PLUG  
TO BNC PLUG**



WV-7308

**F LUG TO F PLUG**



WV-7386

**F PLUG TO TV  
COAXIAL PLUG**



WV-7384/85

**HIGH QUALITY F PLUG  
TO F PLUG**



WV-7390 - 96

### FLEXIBLE COAX LEADS

Super flexible coax leads with multiple-stranded core and a flexible outer casing. Its flexibility makes it easier to run through cabinets and along skirting boards, etc.

Available in RG59 or RG6 quad shielded coax cable with nickel plated, moulded F59 plugs.



WV-7450 - 56

USE	CONNECTOR 1	CONNECTOR 2	LENGTH	QUALITY	CAT.	Qty 1+	Qty 4+	Qty 10+
AV	RCA x 3 Plug	RCA x 3 Plug	1.5m	Good	WV-7316	\$8.95	\$7.95	\$6.95
AV	RCA x 3 Plug	RCA x 3 Plug	3.0m	Good	WV-7318	\$12.50	\$10.95	\$9.95
AV	RCA x 3 Plug	RCA x 3 Plug	5.0m	Good	WV-7320	\$14.95	\$13.35	\$11.70
AV	RCA x 3 Plug	RCA x 3 Plug	10.0m	Good	WV-7321	\$29.95	\$26.95	\$23.95
AV	3.5 (4 Pole) Plug	RCA x 3 Plug	1.5m	Good	WV-7345	\$11.95	\$10.70	\$9.50
Video	S-Video Plug	S-Video Plug	10.0m	Good	WV-7336	\$24.95	\$22.35	\$19.70
AV	Scart plug	RCA x 6 Plug	1.5m	Good	WV-7342	\$11.95	\$10.70	\$9.50
AV	RCA x 3 Piggyback	RCA x 3 Plug	1.5m	Good	WV-7324	\$13.95	\$12.35	\$10.95
AV	RCA x 3 Piggybank	RCA x 3 Plug	3.0m	Good	WV-7325	\$15.95	\$14.35	\$12.70
Video	BNC Plug	BNC Plug	1.5m	Good	WV-7300	\$9.95	\$8.75	\$7.75
Video	RCA Plug	RCA Plug	1.5m	Good	WV-7304	\$6.95	\$6.25	\$5.50
Video	RCA Plug	RCA Plug	3.0m	Good	WV-7306	\$7.95	\$6.95	\$6.25
Video	BNC Plug	RCA Plug	1.5m	Good	WV-7308	\$7.95	\$6.95	\$6.25
Video	F Plug	F Plug	1.5m	Good	WV-7386	\$6.95	\$6.25	\$5.55
Video	F Plug	F Plug - White	1.5m	Good	WV-7366	\$6.95	\$6.25	\$5.55
Video	Coaxial Plug	F Plug	1.5m	Good	WV-7384	\$4.95	\$4.45	\$3.90
Video	Coaxial Plug	F Plug - White	1.5m	Good	WV-7365	\$4.95	\$4.45	\$4.00
Video	Coaxial Plug	F Plug	5.0m	Good	WV-7385	\$9.95	\$8.75	\$7.75
Video	F Plug	F Plug - RG-59	10m	Best	WV-7450	\$19.95	\$17.95	\$15.70
Video	F Plug	F Plug - RG-59	20m	Best	WV-7452	\$29.95	\$26.95	\$23.70
Video	F Plug	F Plug - Quad Shield	10m	Best	WV-7454	\$29.95	\$26.95	\$23.70
Video	F Plug	F Plug - Quad Shield	20m	Best	WV-7456	\$39.95	\$35.90	\$31.90
Video	F Plug	F Plug - RG6 Quad Shield	1.5m	Best	WV-7390	\$8.95	\$8.05	\$7.15
Video	F Plug	F Plug - RG6 Quad Shield	3.0m	Best	WV-7392	\$11.95	\$10.45	\$9.45
Video	F Plug	F Plug - RG6 Quad Shield	5.0m	Best	WV-7394	\$16.95	\$14.95	\$13.45
Video	F Plug	F Plug - RG6 Quad Shield	10m	Best	WV-7396	\$26.95	\$23.95	\$21.45

## Smart Hardware Competition: - XAVIER ROBERTS, SHOPS AT JAYCAR THOMASTOWN

"The laser harp is a chromatic musical instrument played by intercepting an array of laser beams. It's controlled by a raspberry pi which performs vision processing, and outputs MIDI data. The pi also hosts a web interface over Wi-Fi to change the octave, note velocity, MIDI channel and power state."



## AV Leads:

A premium range of audio video cables at the right price. High performance non-migration interconnection cables utilising 99.96% pure OFC.

- 24 carat hard gold plated contacts
- 100% shielded metal bodied plugs
- Positive finger grip & moulded cable strain relief
- Recommended for digital or analogue signals
- Clean and clear image reproduction
- For home theatre, Hi-Fi, video, TV/VCR/editing, DVD, satellite and any application which deserves the absolute best in AV performance
- Will stand up to the quality of units that sell up to 4-5 times more elsewhere (apart from the expensive packaging!)

## CONCORD

**3.5MM STEREO PLUG  
TO 2 X RCA PLUGS**



WQ-7206/08

**RCA PLUG  
TO RCA PLUG**



WQ-7221/22

**RCA PLUG  
TO RCA PLUG**



WQ-7223/25

**2 X RCA PLUGS  
TO 2 X RCA PLUGS**



WQ-7227/30

**S-VIDEO 4 PIN MII DIN  
PLUG TO PLUG**



WQ-7217/20

**3.5MM 4 POLE PLUG  
TO PLUG AV LEAD**



WV-7349

**3.5MM 4 POLE PLUG  
TO SOCKET LEAD**



WV-7347

**3.5MM 4 POLE PLUG  
TO 2 X 3.5MM SOCKET LEAD**



WA-7020

**3.5MM 4 POLE SOCKET  
TO 2 X 3.5MM**



WA-7022

**VGA D15HD PLUG  
TO 3 X RGB PLUGS**



WQ-7259

USE	CONNECTOR 1	CONNECTOR 2	LENGTH	QUALITY	CAT.	Qty 1+	Qty 4+	Qty 10+
Audio	Stereo 3.5 Plug	RCA x 2 Plug	1.5m	Best	WQ-7206	\$17.95	\$15.95	\$14.35
Audio	Stereo 3.5 Plug	RCA x 2 Plug	3.0m	Best	WQ-7208	\$18.95	\$16.95	\$14.95
Video	RCA Plug	RCA Plug	0.5m	Best	WQ-7221	\$10.95	\$9.75	\$8.75
Video	RCA Plug	RCA Plug	1.5m	Best	WQ-7222	\$11.95	\$10.70	\$9.50
Video	RCA Plug	RCA Plug	3.0m	Best	WQ-7223	\$14.95	\$13.35	\$11.70
Video	RCA Plug	RCA Plug	5.0m	Best	WQ-7224	\$17.95	\$15.95	\$14.35
Video	RCA Plug	RCA Plug	10.0m	Best	WQ-7225	\$24.95	\$22.35	\$19.70
Audio	RCA x 2 Plug	RCA x 2 Plug	0.5m	Best	WQ-7227	\$16.95	\$14.95	\$13.35
Audio	RCA x 2 Plug	RCA x 2 Plug	1.5m	Best	WQ-7226	\$18.95	\$16.95	\$14.95
Audio	RCA x 2 Plug	RCA x 2 Plug	3.0m	Best	WQ-7228	\$24.95	\$22.35	\$19.70
Audio	RCA x 2 Plug	RCA x 2 Plug	5.0m	Best	WQ-7230	\$29.95	\$26.95	\$23.95
Video	S-Video Plug	S-Video Plug	5.0m	Best	WQ-7217	\$9.95		
Video	S-Video Plug	S-Video Plug	10.0m	Best	WQ-7220	\$29.95	\$26.95	\$23.95
AV	RCA x 3 Plug	RCA x 3 Plug	5.0m	Best	WQ-7237	\$49.95	\$44.90	\$39.90
Video	RCA x 3 Plug	RCA x 3 Plug	5.0m	Best	WQ-7250	\$49.95	\$44.90	\$39.90
Video	D15HD Plug	RCA x 3 Plug	1.5m	Best	WQ-7259	\$5.95		
AV	3.5 (4 Pole) Plug	3.5 Socket	2m	Good	WV-7349	\$9.95	\$8.75	\$7.75
AV	3.5 (4 Pole) Plug	3.5 Plug	2m	Good	WV-7347	\$9.95	\$8.75	\$7.75
AV	3.5 (4 Pole) Plug	3.5 x 2 Socket	300mm	Good	WA-7020	\$6.95	\$6.25	\$5.50
AV	3.5 (4 Pole) Socket	3.5 x 2 Plug	150mm	Good	WA-7022	\$6.95	\$6.25	\$5.50

### ✓ DVI, HDMI & OPTICAL CABLE/ADAPTORS

#### TOSLINK SPLITTER/JOINER

This optical splitter / joiner works both ways, however typically it's used to split a signal to two receivers. Mechanical connectivity, no power required.

- Works in either direction
- No power required
- Ultra compact
- Weight: 15g
- Dimensions: 58(D) x 40(W) x 21(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10
PA-3512	\$9.95	\$8.95	\$7.95

#### TOSLINK SOCKET TO SOCKET

This tiny device allows you to connect two TOSLINK cables together. Simply plug your TOSLINK cables either side and you instantly have a longer cable!

- Plug and play
- Minimal signal loss
- Dimensions: 28(D) x 14(W) x 12(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10
PA-3511	\$6.95	\$6.25	\$5.55

#### DVI ADAPTOR

- Female to female - all pins wired straight through
- Compatible with DVI-I single dual link, DVI-single/dual link & DVI-A male



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-0896	\$14.95	\$13.35	\$11.70

#### TOSLINK FEMALE TO OPTICAL 3.5MM MALE



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-3574	\$5.95	\$5.25	\$4.75

#### TOSLINK PLUG TO SOCKET RIGHT ANGLE ADAPTOR

A useful adaptor that will let you connect optical cables when there is limited space between the back of the appliance and the wall. Also useful for going around corners!



CAT.	Qty 1+	Qty 4+	Qty 10
PA-3513	\$4.95	\$4.45	\$3.95

## ✓ SMA, DVI & FIBRE OPTIC LEADS

### SMA COAXIAL LEADS - FACTORY PRECRIMPED



WC-7800/04

### DVI-D TO DVI-D VIDEO CABLES



WC-7590/91

### DVI-A TO VGA VIDEO CABLE



WC-7594

### FIBRE OPTIC TOSLINK AUDIO LEAD



WQ-7293/97

### CONCORD FIBRE OPTIC AUDIO LEADS



WQ-7301/03

USE	CONNECTOR 1	CONNECTOR 2	LENGTH	QUALITY	CAT.	Qty 1+	Qty 4+	Qty 10+
Video	SMA Plug	SMA Plug	1.0m	Best	WC-7800	\$19.95	\$17.95	\$15.95
Video	SMA Plug	SMA Plug	3.0m	Best	WC-7802	\$29.95	\$26.95	\$23.70
Video	SMA Plug	SMA Plug	5.0m	Best	WC-7804	\$44.95	\$40.45	\$35.95
Video	DVI-D Plug	DVI-D Plug	2.0m	Best	WC-7590	\$29.95	\$26.95	\$23.95
Video	DVI-D Plug	DVI-D Plug	5.0m	Best	WC-7591	\$44.95	\$40.45	\$35.90
Video	TOSLINK Plug	D15HD Plug	2.0m	Best	WC-7594	\$24.95	\$22.35	\$19.70
Audio	TOSLINK Plug	TOSLINK Plug	0.5m	Good	WQ-7293	\$8.50	\$7.50	\$6.75
Audio	TOSLINK Plug	TOSLINK Plug	1.0m	Good	WQ-7294	\$9.95	\$8.75	\$7.75
Audio	TOSLINK Plug	TOSLINK Plug	2.0m	Good	WQ-7295	\$14.95	\$13.35	\$11.70
Audio	TOSLINK Plug	TOSLINK Plug	5.0m	Good	WQ-7297	\$24.95	\$22.35	\$19.70
Audio	TOSLINK Plug	TOSLINK Plug	1.0m	Best	WQ-7301	\$15.95	\$14.35	\$12.70
Audio	TOSLINK Plug	TOSLINK Plug	3.0m	Best	WQ-7302	\$24.95	\$22.35	\$19.70
Audio	TOSLINK Plug	TOSLINK Plug	5.0m	Best	WQ-7303	\$39.95	\$35.90	\$31.90

## ✓ AV WALLPLATES

Ideal for HDMI extenders.

### BRUSHED REAR CABLE ENTRY WALLPLATE

Allows you to run pre-terminated cables through a wall. Brushed entry and concave extrusion will help protect against dust and keep the cables secured.

- Great for use with HDMI, Cat5, component/composite, S-video, and a variety of other cables (excluding VGA)



CAT.	Qty 1+	Qty 5+	Qty 10+
PS-0296	\$9.95	\$8.75	\$7.75

### BRUSHED CABLE ENTRY WALLPLATE

Single gang brush plate for cable entry through walls etc. Suitable for pre terminated cables going to LCD or plasma screens, and particularly suited to HDMI cables as they can't be split, spliced or field-terminated. An ideal solution if you only have a short cable run.



CAT.	Qty 1+	Qty 5+	Qty 10+
PS-0291	\$9.95	\$8.75	\$7.75

### STANDARD BLANK WALLPLATE

Allows you to run cables through a wall cavity. It is also compatible with our obsolete range of AV connector wallplates (PS-0481 through to PS-0486).

- Fits standard household power point bases and brackets



	CAT.	Qty 1+	Qty 2+	Qty 5+
Blank Plate	PS-0480	\$2.50	\$2.21	\$1.95

### RECESSED CABLE ENTRY WALLPLATE

Create a neat cable entry/exit point for terminated or non-terminated audio and video leads. The wallplate design allows cables to be passed through walls with minimal fuss and the inner curved recessed design ensures maximum safety.

- Mounting screws included
- Screw thread size: 2.5mm

#### SMALL

- Dimensions 124(W) x 82(H) x 36(D)mm

PS-0295

#### LARGE

- Dimensions 124(W) x 82(H) x 55(D)mm

PS-0297



	CAT.	Qty 1+	Qty 5+	Qty 10+
Small	PS-0295	\$6.95	\$6.25	\$5.55
Large	PS-0297	\$7.95	\$7.15	\$6.35

### HDMI 1.4 WALLPLATE WITH FLYLEAD

Give your media station or projector installation a neat finish with this handy multimedia wallplate. Available with a variety of video, audio, and data terminals to suit analogue and digital systems, all connections are double-sided for easy installation. Simply run a pre-made cable within the wall cavity or cabinet and plug it into the back of the wallplate.

- Standard GPO mount wallplate with concealed screws
- Plate dimensions 116(H) x 75(W) x 12(D)mm
- Approximate cavity depth required 60mm
- 150mm flylead behind plate on USB & HDMI connections
- VGA video
- Stereo 3.5mm audio



	CAT.	Qty 1+	Qty 5+	Qty 10+
HDMI 1.4	PS-0281	\$14.95	\$13.35	\$11.70

See page 180 for Keystone Plates & Connectors



### Smart Hardware Competition: - TONY DOWDLE, SHOPS AT JAYCAR SPRINGVALE

"We made a Rotary welder for our Tig welder which gives perfect welds every time. we can control rotation speed, pre and post purge as well as overlap angle."



## TV WALLPLATES & ACCESSORIES

### METAL MOUNTING BRACKETS FOR LARGE WALLPLATES

Suitable for plasterboard walls.



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3033	\$2.95	\$2.60	\$2.30

### LARGE BLANK WALLPLATE

This is a standard power point size white blank wallplate. Size 72 x 115mm. Ideal for many uses, including mounting TV antenna sockets, audio sockets, speaker terminals, low voltage outlets etc, etc.



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3035	\$4.95	\$4.45	\$3.90

### FLUSHMOUNT 75 OHM TV WALL SOCKET WITH F59 CONNECTION

- Standard power point size
- PAL socket output
- F59 connection at rear
- Mounting screws
- Dimensions: 71(W) x 115(H)mm



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3065	\$4.95	\$4.45	\$3.90

### PAL 2 SOCKET WALL PLATE - TV & FM

Standard power point size. Two PAL sockets, one for TV and one for FM. Simply run one cable in from antenna.

- F59 rear connection
- Mounting screws included
- Dimensions: 115(H) x 71(W)mm



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3066	\$6.95	\$6.25	\$5.50

### F61 FLUSHMOUNT WALL SOCKET

Standard power point size.

- Accepts F59 plug both sides of this fitting
- Dimensions: 71(W) x 115(H)mm



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3040	\$4.95	\$4.45	\$3.90

### FOXTEL® APPROVED WALL PLATES

For splitting your foxtel signal to two outlets. These wallplates are Foxtel® approved. We also have a model featuring an RJ12 socket to wire in your home phone.

#### 2 X F61 SOCKET WALL PLATE

LT-3041

#### 2 X F61 & RJ12 SOCKET WALL PLATE

LT-3058



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3041	\$6.95	\$6.25	\$5.50
LT-3058	\$5.95	\$5.35	\$4.75

### WALLPLATE - MINI

Architrave type standard white wall plate with a cutout for the 75Ω snap-in insert shown below.



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3030	\$2.95	\$2.60	\$2.30

### 75 OHM INSERT

Clips into the mini wall plate shown above.



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3031	\$3.50	\$3.15	\$2.75

### 75 OHM TV FLOOR SOCKET WITH F59 CONNECTION

Designed to mount on the skirting board or floor.

- 75 ohm impedance (standard)
- PAL socket output
- F59 connection at rear
- Mounting screws
- Dimensions: 50(L) x 30(W) x 25(H)mm



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3063	\$3.95	\$3.45	\$3.15

### F61 COAX FLOOR ENTRY

White in colour

- Size 58 x 46(base) x 27(H)mm
- Accepts F59 plug both sides of this fitting



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3042	\$3.50	\$3.15	\$2.75

### COAX SEAL TAPE

This versatile material looks like ordinary PVC electrical tape but is actually a handy sealing system that fuses together to form a removable, waterproof seal once it has been applied. The tape has many uses such as waterproofing outdoor coax connections, sealing low pressure vacuum lines, or even as an alternative to heat shrink tubing when access is difficult.

- 12mm wide x 1.5m long
- Used by the US Military and NASA



CAT.	Qty 1+	Qty 4+	Qty 10+
NM-2828	\$12.95	\$11.35	\$10.35

**Find Out More In Store:**  
Our staff offer friendly and helpful service.  
We're here to help.

## CARAVAN TV ACCESSORIES

### TV OUTLET SOCKET

Make sure you never miss your favourite programs, sporting events or current affairs whilst travelling around Australia. This unobtrusive weatherproof cable socket includes connections, to support satellite dishes/receivers and/or a TV antenna. Installation on most caravans, motorhomes and boats is easy: just identify where you want the socket to sit, drill the appropriate holes, feed the attached cables through the holes, and screw the socket into place. Close the cover partially to protect the socket from the weather. When you want to hit the road again, disconnect the cables and close the cover fully. Supplied complete with mounting hardware and an illustrated installation guide.

- Protective cover
- 3m Cables
- Dimensions: 110(L) x 60(W) x 30(H)mm (socket)



	CAT.	Qty 1+	Qty 2+	Qty 5+
Double "F" Connectors	LT-3072	\$29.95	\$26.95	\$23.95
1 x PAL & 1 x "F" Connector	LT-3074	\$29.95	\$26.95	\$23.95

See page 480 for Caravan Antennas

### CARAVAN/RV ANTENNA MAST CLAMP SET

Specifically designed with travellers in mind, you can quickly pop the mast in and out, to maximise your reception when camped. Position the antenna brackets on the side of your caravan, motorhome or boat, then use the self-adhesive pads to quickly and easily secure them in place. The brackets also include holes for screw mounting if you're worried about wild weather conditions and would prefer a more secure option! Suitable for 25-30mm dia antenna masts.

- Two mounting brackets
- Simple assembly
- Suits 25-30mm diameter masts
- Dimensions: 108(L) x 47(W) x 68(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 5+
Pair	LT-3208	\$19.95	\$17.95	\$15.95

### WHITE ROOF MOUNT CABLE ENTRY COVER

This handy weather-proof cable entry cover will allow you to run your caravan's TV antenna cable outside without introducing unnecessary leaks.

- Dimensions: 150(L) x 65(W) x 30(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3076	\$9.95	\$8.95	\$7.95



WARRANTY



WARRANTY

## TV FLYLEADS

TV COAXIAL PLUG  
TO TV COAXIAL PLUG



WV-7350

TV COAXIAL PLUG  
TO TV COAXIAL PLUG



WV-7363

TV COAXIAL PLUG  
TO SOCKET



WV-7360

TV COAXIAL PLUG  
TO SOCKET



WV-7364

F PLUG TO TV  
COAXIAL PLUG



WV-7384

F PLUG TO TV  
COAXIAL PLUG



WV-7366

F PLUG TO F PLUG



WV-7386

F PLUG TO F PLUG



WV-7365



### FLEXIBLE COAX LEADS

A range of super flexible coax leads with multi-stranded core and a flexible outer casing that is less likely to tangle and prevents kinking. Available in RG59 or RG6 quad shielded coax cable with nickel plated, moulded F59 plugs.

CONNECTOR 1	CONNECTOR 2	LENGTH	CAT.	Qty 1+	Qty 4+	Qty 10+
TV Coaxial Plug	TV Coaxial Plug	1.5m	WV-7350	\$5.95	\$5.25	\$4.75
TV Coaxial Plug	TV Coaxial Plug	1.5m - White	WV-7363	\$5.95	\$5.50	\$4.75
TV Coaxial Plug	TV Coaxial Plug	3.0m	WV-7351	\$7.95	\$6.95	\$6.25
TV Coaxial Plug	TV Coaxial Plug	5.0m	WV-7352	\$9.95	\$8.75	\$7.75
TV Coaxial Plug	TV Coaxial Plug	10.0m	WV-7354	\$16.95	\$14.95	\$13.35
TV Coaxial Plug	Socket	1.5m	WV-7360	\$4.95	\$4.45	\$3.90
TV Coaxial Plug	Socket	1.5m - White	WV-7364	\$4.95	\$4.45	\$4.00
TV Coaxial Plug	Socket	3.0m	WV-7361	\$7.50	\$6.75	\$5.95
TV Coaxial Plug	Socket	5.0	WV-7362	\$8.90	\$7.95	\$6.95
F Plug	TV Coaxial Plug	1.5m	WV-7384	\$4.95	\$4.45	\$3.90
F Plug	TV Coaxial Plug	1.5m - White	WV-7366	\$6.95	\$6.25	\$5.55
F Plug	TV Coaxial Plug	5.0m	WV-7385	\$9.95	\$8.75	\$7.75
F Plug	F Plug	1.5m	WV-7386	\$6.95	\$6.25	\$5.55
F plug	F Plug	1.5m - White	WV-7365	\$4.95	\$4.45	\$4.00
Flexible Coax Leads	F Plug	10m - RG-59	WV-7450	\$19.95	\$17.95	\$15.70
Flexible Coax Leads	F Plug - RG6	20m - RG-59	WV-7452	\$29.95	\$26.95	\$23.70
Flexible Coax Leads	F Plug - RG6 Quad Shield	10m	WV-7454	\$29.95	\$26.95	\$23.70
Flexible Coax Leads	F Plug - RG6 Quad Shield	20m	WV-7456	\$39.95	\$35.90	\$31.90

## BALUNS & FILTERS

### FLAT ANTENNA CABLE FOR WINDOW INSTALLS

This unassuming piece of cable can be a lifesaver. Its flat ribbon cable style means it will fit in door jambs and other tight spaces without damage. Just 265mm long with F-type female connectors on either end. Female to female joiner so you can place it inline with two standard F-type coax cables.

#### Features:

- Flat ribbon cable for tight spaces
- Will fit under a sash window or similar when the window is closed
- Low signal drop
- Quality F-type connections
- 265mm long
- 25g



	CAT.	Qty 1+	Qty 4+	Qty 10
Flat Antenna Cable	WV-7301	\$9.95	\$8.95	\$7.95

### 4G/LTE FILTER FOR DIGITAL TV RECEPTION

Since the re-stacking of Digital TV transmissions has already begun, pretty soon 4G/LTE mobile phone signals will start being transmitted on the old UHF TV channels 52-69. Of course, this means that UHF antennas will be picking up those signals, and interfering with Digital TV reception. When this filter is plugged into the back of a digital TV receiver blocks unwanted signals from 4G/LTE mobile transmitters.

- In-line coax connection - waterproof design
- Frequency pass range: 5-694MHz
- Insertion loss <1dB
- LTE band rejection: 720-1000MHz, 40dB



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3062	\$14.95	\$13.45	\$11.95



### TV ANTENNA SIGNAL FILTER "F" TYPE - FL694LP 4G LTE

Designed to fit in-line with an F-type coaxial cable or to your masthead amplifier. This easy to use filter will remove cell phone interference from your TV signal.



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3067	\$19.95	\$17.95	\$15.95

### INDOOR BALUNS

#### 75Ω TO 300Ω

75Ω socket for input and 300Ω ribbon cable output. Allows connection of any 75Ω output (video, TV games etc) to a TV with an older style 300Ω input.



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3022	\$4.50	\$3.95	\$3.60

### OUTDOOR BALUNS

#### 300Ω TO 75Ω - 'F' TYPE

Mounts on antenna. Converts natural 300Ω impedance of an antenna to 75Ω for coax. 'F' type female output. Eliminates saddle clamp termination. Requires F plug.



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3028	\$4.95	\$4.45	\$3.90

## INDOOR ANTENNAS

### UHF/VHF PASSIVE INDOOR TV ANTENNA - DESK OR WALL MOUNT


The traditional "rabbit" ears antenna for the modern day. With flat screen TV's, rabbit ear antennas no longer have the ideal spot sitting on top of the set. These rabbit ears can sit flat on a surface or be mounted on to a wall. Suits digital TV signals

- Mounting hardware included

<b>SPECIFICATIONS</b>	<b>LT-3116</b>			
<b>Frequency Range</b>	VHF: 174-230MHz, UHF: 470-862MHz			
<b>Cable Length</b>	1.6m			
<b>Dimensions</b>	195(W) x 15(D)mm			

### SLIM DIGITAL TV INDOOR ANTENNA WITH AMPLIFIER


This digital TV antenna is fitted with an LTE/4G filter which protects your TV from mobile broadband interference. It also features adjustable gain as well as telescopic dipoles and an adjustable loop aerial for optimal performance.

<b>SPECIFICATIONS</b>	<b>LT-3206</b>				
<b>Max Output</b>	90dBuV				
<b>Max Noise</b>	1.5/1.8dB (VHF/UHF)				
<b>Frequency</b>	VHF: 174-230MHz UHF: 470-694MHz				
<b>Dimensions</b>	230(L) x 195(W)mm				
		<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 2+</b>	<b>Qty 5+</b>
		LT-3206	\$39.95	\$35.90	\$31.90

### INDOOR FLAT PANEL UHF/VHF DIGITAL ANTENNA WITH AMP


Sits unobtrusively near your TV. A very capable unit featuring signal clear technology with extremely low noise circuitry. It is able to pick up both UHF/VHF signals as well as DAB+ radio. It is also coupled with a separate amplifier with independent UHF and VHF gain adjustments. The amp can be powered with the supplied mains adaptor or from a USB cable (mini plug lead not supplied). Though the unit does not require the amplifier, it may be needed for areas with weak indoor reception.

- Built in LTE/4G filter


<b>SPECIFICATIONS</b>	<b>LT-3156</b>	
<b>VHF Frequency</b>	45-230MHz	
<b>UHF Frequency</b>	470-862MHz	
<b>Output</b>	Max 78dB	
<b>Channels</b>	0-12 & 20-75	
<b>Impedance</b>	75Ω	
<b>Panel Size</b>	480(L) x 109(W) x 54(D)mm	


### DIGITAL INDOOR/OUTDOOR ANTENNA

As global television moves from analogue to digital, this indoor/outdoor digital antenna will be a great investment to your household. With its contemporary style design it may provide you with the high quality clear reception needed. The panel can mounted to the wall; great for minimising space. AC adaptor included.



SPECIFICATIONS	LT-3137
Frequency Range	VHF: 174-230MHz UHF: 470-862MHz
Antenna Gain	10dB
Total Gain	40dB
Impedance	75Ω
Output	F Female Connector
Dimensions	502(L) x 235(W) x 76(H)mm





WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3137	\$99.95	\$89.95	\$79.95

## AM / FM ANTENNAS

### INDOOR AM ANTENNA

Stereo tuners aren't made with internal antennas. Most people listen to FM with their tuner, but for the rest who want AM, we have the answer - a loop antenna that can be easily left on top of your stereo cabinet or stored out of sight. It has built-in stand and fly leads to fit the antenna spring terminals on most tuners.

SPECIFICATIONS	LT-3001			
Frequency Range	520 - 1660kHz			
Dimensions	120(W) x 120(H)mm			
	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3001	\$19.95	\$17.95	\$15.95

### FM INDOOR ANTENNA

Simple ribbon type antenna (dipole) gives good performance in strong signal areas.

- 300Ω termination

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3002	\$4.95	\$4.45	\$3.90

For our Shortwave Passive Reel Antenna see page 450

## Tech Talk: Indoor TV Antennas?

Jaycar carries a great range of "indoor" type TV antennas in both passive & active gain models, which are good quality. Many people select such products hoping that they will offer satisfactory TV reception without the cost and/or hassle of a full outdoor TV antenna system. Often people who are renting premises cannot install a full TV antenna system anyway because they are not allowed to drill holes etc. The reality, however, is that indoor TV antennas rarely give totally satisfactory results. The antenna element dimensions never correspond to broadcast frequencies for a start. Because you are inside, you may have no idea where the TV tower is anyway. Even if you knew where the tower was the antenna rarely has directional qualities. This makes the towers' location fairly meaningless. Trying to make an indoor antenna according to the laws of physics misses the point. Despite this, indoor TV antennas can work amazingly well! Just don't get too scientific about it. They work best when you can throw a rock and hit the TV tower. As all the channels you want to watch will not be in rock-throwing distance, some stations will work better than others. Wiggling the antenna around is really your only available technique. Indoor TV antennas are made for flat dwellers in large Western or Asian cities with high building density. In other words, all the TV towers will not be far away.

If you live in a "spread out" city and cannot see a TV tower i.e. like most Australian and New Zealand cities, it is highly likely that an indoor antenna will not solve your reception problems. There may simply be very little signal for you to pick up. Just imagine walking into a darkened room at night. Even with your eyes wide open you see virtually nothing until your eyes adjust to the conditions. At best you can see, say the white frame of a door. You certainly would not be able to read! You would not blame your eyes because you could not see but people frequently blame an indoor TV antenna in a similar situation for "not working" (visible light and TV signals are both

part of the electromagnetic spectrum).

So when you buy an indoor antenna - from us or anyone else - don't expect a lot. If you bring the product back and say "it doesn't work", we know that you are really blaming the messenger. You may think that our words are a bit harsh but we respect both your time and your money too much to tell you what you need to hear, not what you want to hear. The copy above relates mainly to Analogue TV systems. They are basically gone now but the need for an indoor or temporary TV antenna still exists. Let us Jaycar people take a position on this: We do not like indoor TV antennas and if we could get away with it, we would not sell them.

The behaviour of an indoor TV antenna can be ok, it can really be bizarre. If you are renting a flat and have a hopeless TV (Digital) reception you really need to get the landlord to fit a proper TV signal feed. Good Luck.

The TV Signal is still R.F. however, although digitally encoded. This means that the indoor antenna is still capable of picking up the radio frequency signal and converting it into a signal voltage. In all likelihood the antenna will pick up several versions of the R.F. signal at once. This is because R.F. being R.F. will have made its way to your antenna via several paths. It will be up to the front end of your TV receiver to distinguish the strongest signal and ignore the others. Modern TV front ends are pretty good at this.

So if you are in a rented flat and want to watch TV try one of our indoor antennas. Ours are as good as or better than anyone else's. If you are not happy with the performance of the antenna, keep the packaging, your receipt and bring it back to us if you feel you have to. Just don't tell us that "... it does not work..." You will get your money back all right, but you might get a blank stare.....




## UHF ANTENNAS

### MINI UHF LOG PERIODIC ANTENNA

This UHF mini log periodic antenna has been specifically designed for Digital TV reception. It is supplied with an easy to install mounting bracket and "J" mast. Compact in size the antenna is capable of being installed vertically or horizontally and with 7.5dB of gain is the ideal reception solution for areas with medium levels of signal.

SPECIFICATIONS	LT-3151
Element	20
Band	4-5
Channels	21-69
Frequency	470-862MHz
Gain	7.5dB
F/B Ratio	21dB
Overall Length	400mm
Maximum Width	311mm




1  
YEAR  
WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3151	\$59.95	\$53.95	\$47.95

### UHF PHASED ARRAY TV ANTENNA

This heavy duty UHF phased array is ideal for problem digital reception areas where you may not have direct line of sight to the transmitter or there may be multipath issues due to reflected signals. It is capable of receiving either horizontal or vertical signals by changing the orientation of the heavy duty mounting bracket/U-bolt assembly. The LTE filter provides protection against 4G/LTE telephone communications.

SPECIFICATIONS	LT-3154
Gain	12.5dB
Wind Load	78
Frequency	519-694MHz
Channels	27-51
Front to Back Ratio	22dB
No of Elements	4
Impedance	75 Ohm
Dimensions	815 x 545mm



1  
YEAR  
WARRANTY


CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3154	\$74.95	\$67.45	\$59.95

### 43 ELEMENT UHF ANTENNA

TV antennas suitable for medium or deep fringe signal reception areas. Features an LTE filter to prevent interference from 4G/LTE mobile networks, which is housed within a waterproof dipole box with F-type connection. Easy assembly - just fold elements into position.

- High quality waterproof F-type balun
- In-built filter for next-gen LTE/4G network signals

SPECIFICATIONS	LT-3181
Elements	43
Band	4-5
Channels	21-69
Frequency	470 - 750MHz
Gain	11 - 13dBi
F/B Ratio	15 - 25dB
Impedance	75Ω
Overall Length	1285mm



CAT.	Qty 1+	Qty 2+	Qty 5+
43 Element	\$44.95	\$40.45	\$35.90


## VHF ANTENNAS

### ELEMENT VHF YAGI DIGITAL TV ANTENNA

With the major cities in Australia now receiving their Digital TV reception on Band 3, the Kingray range of yagi antennas provide the perfect solution for metropolitan and some country areas. The antennas are almost completely assembled out of the box, with only the reflector and director having to be attached to the boom. The heavy duty 12mm elements, stainless steel screws on the driven element connection points, powder coated boom and UV stabilised plastics will ensure many years of trouble free reception. They are also suitable for DAB+ reception.

NOT AVAILABLE IN NEW ZEALAND.

SPECIFICATIONS	LT-3152	LT-3153
Elements	4	6
Band	3	3
Channels	6-12	6-12
Frequency	174-230MHz	174-230MHz
Gain	9.5dB	10.5dB
F/B Ratio	15dB	16dB
Overall Length	735mm	1275mm
Maximum Length	835mm	835mm



1  
YEAR  
WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 5+
4 Element	LT-3152	\$74.95	\$67.45	\$59.95
6 Element	LT-3153	\$89.95	\$80.95	\$71.95

### DIGIMATCH VHF BAND 3 ANTENNAS

Major metro cities in Australia are receiving their Digital TV broadcasts exclusively on VHF band 3 channels 6-12). These fantastic heavy duty VHF Yagi antennas made exclusively for Jaycar by Matchmaster have all the features you expect - high grade 12.7mm diameter aluminium extruded elements, "G-unit" dipole, UV stabilised black plastic isolators, stainless steel hardware, blue powder coated boom, and a high grade F-type balun for superior digital performance. And let's not forget these are 100% Australia made! A sure bet for the best Digital TV reception in your home.


Two models available:

**6 ELEMENT VHF BAND 3 ANTENNA** LT-3161  
**10 ELEMENT VHF BAND 3 ANTENNA** LT-3165



**DIGITAL READY  
FOR METRO  
DIGITAL  
AREAS**





SPECIFICATIONS	LT-3161	LT-3165
Elements	6	10
Gain	8dB	9.5dB
Avg. VSWR	<2.2:1	<2.0:1
Max F/B Ratio	19.4dB	21.5dB
Channels	6-12	6-12
Boom Length	686mm	1548mm
Max Width	900mm	900mm



1  
YEAR  
WARRANTY

	CAT.	Qty 1+	Qty 2+	Qty 5+
6 Element	LT-3161	\$109.00	\$97.95	\$86.95
10 Element	LT-3165	\$149.00	\$133.95	\$118.95

**Addicted to Social?  
We're Here to Chat!**

-  [facebook.com/jaycarelectronics](https://facebook.com/jaycarelectronics)
-  [instagram.com/jaycar\\_electronics](https://instagram.com/jaycar_electronics)
-  [twitter.com/jaycarau](https://twitter.com/jaycarau)
-  [youtube.com/user/JaycarVideo](https://youtube.com/user/JaycarVideo)

## Select Your Model: TV Antennas

	Type	Elements	Channels	Frequency Range (MHz)	Gain	Front-Back ratio	Overall Length	Page
LT-3172	Combination	7	6-12 21-69	174-230 526-659	VHF 8dB UHF 12dB	VHF 12dB UHF 16dB	720mm	479
LT-3195	Combination	27	6-12 21-69	174-230 526-659	VHF 7dB UHF 11dB	VHF 12dB UHF 18dB	1320mm	479
LT-3151	UHF	20	21-69	470-862	7.5dB	21dB	400mm	478
LT-3154	UHF	4	27-51	519-694	12.5dB	22dB	815mm	478
LT-3181	UHF	43	21-52	470-750	11-13dBi	15-25dB	1285mm	478
LT-3152	VHF	4	6-12	174-230	9.5dB	15dB	735mm	478
LT-3153	VHF	6	6-12	174-230	10.5dB	16dB	1275mm	478
LT-3161	VHF	6	6-12	174-230	8dB	19.4dB	686mm	478
LT-3165	VHF	10	6-12	174-230	9.5dB	21.5dB	1548mm	478

### ✓ COMBINATION VHF/UHF DIGIMATCH ANTENNA

These Australian made heavy duty antennas are the ideal metropolitan antennas for Digital TV as they are capable of receiving digital and analogue TV on VHF channels 6-12 and UHF channels 21-69. The UHF section of the antenna employs X-type elements for wider bandwidth and higher gain, whilst the VHF section has elements made from high grade aluminium strong enough to withstand damage from birds. The VHF section of these antennas can be mounted horizontally or vertically for areas such as Canberra and Shepparton, making them suitable for all TV transmitters throughout Australia. Their overall design has improved figures for gain, VSWR and F/B ratio to give a superior carrier to noise ratio - this means more signal, less noise and therefore much lower chance of picture dropouts. The Digital anti-reflection Matching System (DMS) employs a diplexer to electronically couple the VHF and UHF sections of the antenna together, giving 20dB isolation to achieve a better Bit Error Ratio (BER) and maximum digital performance.

- Ready for today and future UHF allocations and Plus One networks
- F-Type PCB balun & diplexer for quick installation and improved VSWR
- Black ABS UV resistant plastics
- 12.7mm dia. VHF elements
- Stainless steel screws
- Australian designed and manufactured
- Powder coated boom (blue)



DIGITAL  
READY

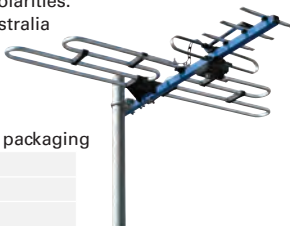
NOT AVAILABLE IN NEW ZEALAND.

#### DIGIMATCH VHF/UHF ECONOMY 7 ELEMENT

Receives Band 3, 4, and 5 (Channel 6-12 and 21-69). Perfect for caravans or space-conscious metropolitan areas. Designed to enable positions in all horizontal, vertical or horiz/vert. polarities.

- Suitable for all transmitters across Australia
- High performance / Heavy duty construction
- Stainless steel connection screws
- Black UV resistant plastics / Powder coated boom
- Supplied in stout, compact cardboard packaging

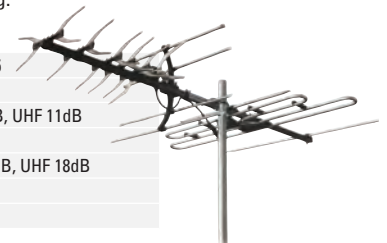
SPECIFICATIONS	LT-3172
Boom Length	720mm
Max Width	880mm



#### DIGIMATCH VHF/UHF X-TYPE COLINEAR 27 ELEMENT

Receives Band 3, 4, and 5 (Channel 6-12 and 21-69). Supplied in stout, compact cardboard packaging.

SPECIFICATIONS	LT-3195
Elements	27
Gain	VHF 7dB, UHF 11dB
Avg. VSWR	1.9:1
Avg. F/B Ratio	VHF 12dB, UHF 18dB
Boom Length	1320mm
Max Width	900mm



	CAT.	Qty 1+	Qty 2+	Qty 5+
7 Element Antenna	LT-3172	\$99.95	\$89.95	\$79.95
27 Element Antenna	LT-3195	\$149.00	\$133.95	\$118.95

### Smart Hardware Competition:

- WILL TAMBLYN, SHOPS AT JAYCAR CLOVELLY PARK

"I built a holographic display! Well, technically it's a volumetric display... My friend Gavin and I used to have Thursday night lab sessions just trying to invent things over a few beers. We wondered why no-one had invented a Star Wars hologram yet, so we set out to do it. 10 years later and here's the results of a lot of hard work!"



## UHF/VHF ANTENNAS (CONTINUED)

### OUTDOOR OMNI-DIRECTIONAL UHF/VHF AMPLIFIED DIGITAL ANTENNA

With inbuilt low noise and high gain booster, this compact and weather resistant outdoor digital antenna is ideally suited for caravans, boats, and other fixed or mobile applications where space is constrained or harsh environmental conditions require a little extra durability. Excellent wide frequency reception for local free-to-air analogue and digital TV, DAB+ digital radio as well as FM radio transmissions. It can be either base mounted or mast mounted and includes mounting bracket, 12V mains power adaptor and a 12V in-car charger.

- SMD technology
- Anti-rust and UV protected



SPECIFICATIONS	LT-3141
FM	87.5 - 108MHz
VHF	174-230MHz
UHF	470-862MHz
Output level	Max 108dB
Impedance	70 Ω
Receiver Dish	350 (Dia) x 60(H)mm
Mounting Base	120(Dia) x 70(H)mm



WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3141	\$89.95	\$80.95	\$71.95

### OUTDOOR UHF/VHF/MARINE TV ANTENNA

Digital ready. It rotates. Ideal for "grey nomads". This unit is ideal for the traveller. This antenna works on all frequencies ideal for any part of Aust/NZ. (Some better than others, we admit). It covers VHF low, down to 45MHz (channel 2) to 860MHz (channel 69). Includes a signal amp, a rotator motor, a remote control and also with approx. 8m of TV lead with a weatherproof plug on one end.

- 12VDC mains adaptor supplied
- Includes booster amp which will drive 2 x TV's
- Compatible with LT-3204 telescopic mast
- Output 80 dBuV
- Remote includes: 1 x 12V battery
- Antenna measures: 750(W) (deployed) x 300(L) x 100(D) (mm) (Folds down for storage)



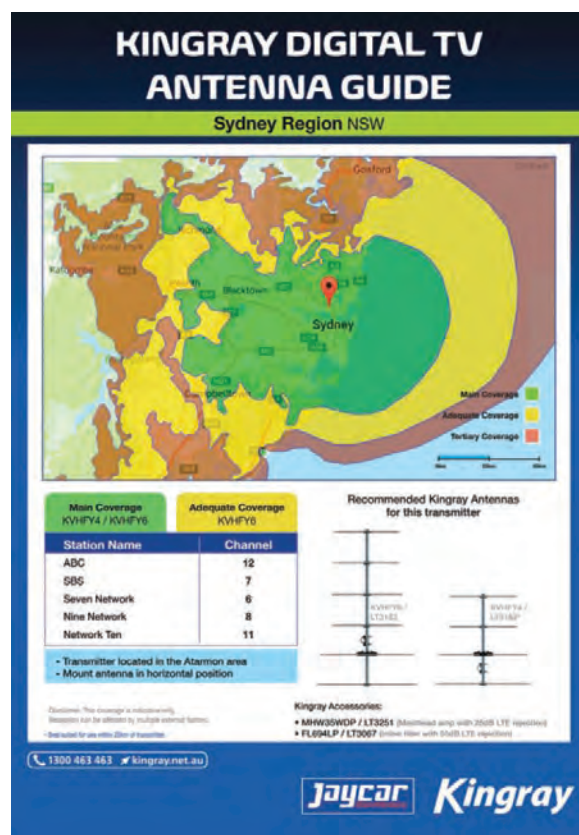
WARRANTY



CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3143	\$64.95	\$58.45	\$51.95

## Tech Talk: Digital Tv Antenna Guides

Before you invest in a new antenna and make the effort to climb up on the rooftop to install it, be sure to check out our TV Antenna Guide to make sure you have the correct antenna. Our friends at KINGRAY have come up with some very useful TV Antenna Guides that recommend the best antenna for your area. The coloured charts show you the main, adequate and tertiary TV coverage areas based on the transmitter tower's location, and then recommends which antenna is best suited to that location. The guide also suggests accessories, such as masthead amplifiers, that you may need depending on your location. TV antenna guide for the Sydney Region shown below.



Visit our website [www.jaycar.com.au/tvantennas](http://www.jaycar.com.au/tvantennas) or visit your local Jaycar store to view the FREE guide.

## Smart Hardware Competition:

### - LINCOLN HUDSON, SHOPS AT JAYCAR WOOLLOONGABBA

"Living in the bush means collecting your own rainwater. To deliver water to the house it needs to be pressurised, in this case by gravity from a tank up the hill. The process to fill the tank used to involve turning on a pump and looking out the window with through binoculars until it overflowed. Now this smart box, connected to a float switch in the tank, does it automatically. Based on an Atmel microcontroller programmed in BASCOM, the system also safeguards against water leaks and pump failures to prevent loss of precious rainwater. The input cable from the remote float switch is heavily protected to try and prevent failure from surges associated from lightning. The design is housed in a Jaycar box and uses a number of Jaycar components within. Bespoke covers over mains components were designed and built on a 3D printer."



\$1000  
JAYCOINS

WINNER





## SPLITTERS/AMPLIFIERS

### INDOOR TV AMPLIFIER/SPLITTERS

#### SINGLE OUTPUT

Such a simple and neat solution to boosting your TV antenna signals. The unit simply plugs into a mains outlet, and boosts your TV antenna signals through the F-type input and output sockets. There is also a mains output socket on the front so that you don't lose any power points behind your TV unit. Up to 20dB of amplification is provided, with a variable gain control.



SPECIFICATIONS	LT-3285
Frequency Range	46-860MHz
Gain	20dB
Gain Control	15dB VHF, 10dB UHF
Noise Figure	Only <3.5dB
Dimensions	96(L) x 60(W) x 40(D)(mm)

FEATURES  
"F"  
SOCKETS

#### 2 WAY

Boost your TV signal indoors. The antenna lead is plugged into the amplifier, and there are two outputs for two TVs, both which have a 12dB boost. One outlet can be used for FM stereo if desired. Runs on 240VAC mains, and includes a LED power indicator.

#### 4 WAY

A digital television splitter/amplifier for use in multiple receiver applications. The amplifier has F type input/output connectors and features variable gain on the VHF band. The unit operates from 240VAC and is mounted in a white ABS housing with integral mounting lugs. Size 60(W) x 40(H) x 85(L)mm. Adaptors are included to suit Belling Lee installations.



3  
YEAR  
WARRANTY

SPECIFICATIONS	LT-3287
Frequency Range	40 - 860MHz
Variable Gain	0 - 6db

Kingray

	CAT.	Qty 1+	Qty 2+	Qty 5+
Single Output	LT-3285	\$44.95	\$40.45	\$35.90
2 Way	LT-3288	\$44.95	\$40.45	\$35.90
4 Way	LT-3287	\$89.95	\$80.95	\$71.95

### AMPLIFIER 20DB GAIN PLUG IN 4G LTE FILTER

This TV amplifier with 4G filter is ideal for improving reception on a single TV whilst simultaneously eliminating interference from mobile phone signals. To use, simply plug into electrical socket, connect TV antenna cable into the "ANT" socket and the TV/VCR cable into the "TV" socket. Once proper connection is made, turn the power on and select gain level as required. Includes 2 x 'F' Type male to PAL female connectors.

- 4G LTE filter output 694-862MHz
- Frequency 40 - 694MHz
- Adjustable gain 20dB
- Power: 240VAC/50Hz 10A 2.5Watt
- Low Noise 3dB
- Built in LED indicator
- RF shielded internal metal housing
- For indoor use only



Matchmaster  
TV Reception Systems

1  
YEAR  
WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3289	\$54.95	\$49.45	\$43.95

### Raincheck!

If your local Jaycar store has sold out of a currently advertised line will be happy to issue a raincheck.

\*Conditions apply - see page 526 For details

### MAST HEAD AMPLIFIER

Provides a powerful boost to help provide a quality free-to-air TV signal to your set top box. Mounts on your antenna mast, powered by an inside power injector which connects inline to the TV outlet. Includes mounting hardware, suitable for indoor/outdoor use.

#### Features:

- High gain amplification
- Multiple mounting options
- Full 1080p HD ready



SPECIFICATIONS	LT-3276
Frequency Range	VHF: 47-230MHz UHF: 470-700MHz
Gain	VHF: 18dB ±3dB UHF: 16dB ±3dB
Weight	26g
Dimensions	190(H) x 140(W) x 55 (D)mm

	CAT.	Qty 1+	Qty 2+	Qty 5+
Mast Head Amplifier	LT-3276	\$49.95	\$44.95	\$39.95

### KINGRAY VHF/UHF MASTHEAD AMP WITH LTE/4G FILTERS

As you may be aware by now, a large chunk of the Australian TV broadcast spectrum is being reallocated for the next generation 4G/LTE mobile phone service. This is currently due to happen at the end of 2013, and early reports are suggesting that this reallocation of the spectrum may interfere with existing TV reception apparatus. To guard against this, Kingray have produced this Australian made masthead amp that provides a good VHF & UHF TV band gain, and user selectable filters for VHF bands 1&2, FM radio, fixed pagers, and the new 4G/LTE band.

- Supplied with AC power injector and F-type to PAL adaptors
- Combination and separate VHF & UHF Antenna inputs A fantastic product proudly made in Australia



Kingray

SPECIFICATIONS	LT-3251	MADE IN AUSTRALIA
Frequency Range	VHF 44-230MHz, UHF 520-860MHz	
Gain	VHF 22-26dB, UHF 35dB	
Gain Control	VHF 16-12dB, UHF 15dB	
Noise Figure	VHF 3.5dB, UHF 2.1dB	
Selectable Filters	FM, LTE, VHF band 1 & 2, fixed pagers	
Suitable Power Supplies	LT-3256, LT-3258 or LT-3259	

3  
YEAR  
WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3251	\$119.00	\$106.95	\$94.95

LTE = Long Term Evolution (4G Wireless Broadband Technology)

### REPLACEMENT POWER SUPPLIES FOR MASTHEAD AMPLIFIERS

F-Socket power injector.

- 14VDC @ 150mA - LT-3256
- 17.5VAC @ 100mA - LT-3258
- Connection: F-59



3  
YEAR  
WARRANTY

Kingray

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3258	\$29.95	\$26.90	\$23.70
LT-3256	\$29.95	\$26.90	\$23.70

### 12V MASTHEAD AMP POWER INJECTOR

An easy solution to powering a masthead amp on a caravan, RV, camper trailer etc. It plugs into a cigarette lighter/12V power socket and feeds power for a masthead amplifier. Simply connect between the antenna down lead and your set top box. F-type connections fitted.

- Suitable with LT-3251 VHF/UHF masthead amplifier
- Ideal for Caravans and RV's



1  
YEAR  
WARRANTY

CAT.	Qty 1+	Qty 2+	Qty 5+
LT-3259	\$39.95	\$35.90	\$31.90

## SPLITTERS/AMPLIFIERS

### RF OVER CAT5 AMPLIFIER

At the heart of the Kingray CATTV™ system is the CAT01 high output distribution amplifier - capable of supplying quality signal to up to four television receivers. The CAT01 amplifier incorporates master gain and tilt controls, plus individual gain controls for each outlet, delivering a balanced output level regardless of cable lengths.

#### Features:

- High Output
- 35dB maximum gain
- -20dB test point
- Wide bandwidth



**Kingray**



#### SPECIFICATIONS

	LT-3236
Frequency Range	47-862MHz
Gain	35dB max.
Output Level	98dB
Minimum Input Level	63dBµV
Tilt Control	0-15dB
Input Gain Control	0-20dB
Noise Figure	-8dB
Return Loss	-13dB
Isolation	-20dB (port to port)
Test Point	-20dB
Current Draw	800mA at 5VDC

	CAT.	Qty 1+	Qty 2+	Qty 5+
RF over CAT5 Amplifier	LT-3236	\$299.00	\$269.00	\$239.00

### 2M RJ45 - PAL LEAD SUITS LT-3236

The Kingray KLE02 impedance matching balun cable for connection between the RJ45 wall outlet and the television ensuring optimal performance at all times.



**Kingray**

	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3237	\$29.95	\$26.95	\$23.95

### INDOOR DIGITAL TV AMPLIFIER UHF/VHF

A portable and compact amplifier capable of boosting signals to passive indoor TV antennas for both digital and analogue signals. It can be powered from the supplied mains adaptor or USB (mini plug available separately) and features independent manual UHF and VHF gain adjustments to give you greater control over your signal. In-built signal clear technology with low noise circuitry will help to give you the best possible picture and video.

- Standard PAL input and output connections



#### SPECIFICATIONS

	LT-3281
VHF Frequency	45 - 230MHz
UHF Frequency	470 - 862MHz
Gain	20dB
Noise	<3dB
Impedance	75 Ω
Dimensions	100(L) x 60(W) x 27(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 5+
Single	LT-3281	\$29.95	\$26.90	\$23.70

### UHF/VHF/FM INDOOR AMPLIFIER TV SPLITTERS

Split and amplify your UHF, VHF or FM signals with these handy amplifier splitters. Features high gain and low noise to ensure your signal is of a high quality. Both units can be wall mounted for greater convenience.

- Mains adaptor included



#### SPECIFICATIONS

	LT-3282
Frequency Range	47 - 900MHz
Output(max)	2 x 87dBuV
Gain Average	20dB
Noise	<2dB
Power	12VDC/50mA
Dimensions	110(L) x 70(W) x 35(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3282	\$24.95	\$22.35	\$19.70

## Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.



### Smart Hardware Competition:

- ROBERT TELONIS,  
SHOPS AT JAYCAR FERN TREE GULLY

"Refit some old audiolines with Jaycar drivers, also made crossovers from parts from my local jaycar"



## SPLITTERS / AMPLIFIERS

### INDOOR SPLITTER - 2 WAY

Allows you to connect two TV, video, games, FM receivers etc to one RF plug, so you can run multiple devices on one outlet.

- Takes standard PAL RF connectors
- 2 x female sockets to male plug



	CAT.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3020	\$5.95	\$5.25	\$4.75

### F CONNECTOR DIE CAST METAL CASE TV SPLITTER

These splitters are sealed in a metal case with a mounting bracket. They are suitable from 5 - 900MHz, VHF, UHF TV and FM radio.

- Requires F type plugs *Low VSWR for Performance*
- Supplied with mounting screws
- Power pass for masthead amps on all ports.



	CAT.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3044	\$7.95	\$6.95	\$6.25
4 Way	LT-3045	\$9.95	\$8.75	\$7.75

### SINGLE POWER PASS

These have power pass on the input to one output. This is to allow voltage up through the splitter to power a masthead amplifier or satellite dish LNA. These allow the voltage on one port only, so if anything goes wrong, all ports are not affected by low frequency shorts.

*Low VSWR for Performance*



**DIGITAL READY**

	CAT.	Qty 1+	Qty 2+	Qty 5+
2 Way	LT-3046	\$12.95	\$11.35	\$10.35
4 Way	LT-3047	\$17.95	\$15.95	\$14.35

## TV ACCESSORIES

### DIGITAL TV SIGNAL STRENGTH METER

No more multiple trips up to your roof to get that perfect picture. Connect the pocket sized DVB-T signal strength meter and adjust the angle of your digital TV antenna, the easy to read LED indicator lets you know when you've hit the right spot. Adapters included.

- Requires 1 x 9V battery
- Frequency range: 40-862MHz
- Input Level: 50-90dBuV



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LT-3332	\$39.95	\$35.90	\$31.90

### SATELLITE FINDER WITH LED DISPLAY

Connected between the satellite dish and set top box the meter displays signal strength on the 6 LED display. Once the meter picks up a signal use the adjustable sensitivity to fine tune the angle and lock in on the signal. A small compass is included to help you get the dish pointed in the right direction. Perfect for setting up permanent dishes as well as portable systems on caravans or RVs.

- Dimensions: 90(L) x 48(W) x 31(H)mm



	CAT.	Qty 1+	Qty 2+	Qty 5+
	LS-3302	\$24.95	\$22.35	\$19.70

### AUDIO/VIDEO RF MODULATOR WITH DISPLAY - STEREO

Converts the composite video and stereo audio signal from your DVD player, Pay TV, Camera etc into a standard UHF or VHF TV channel so you can watch the program via the antenna input of the TV. It is easy to connect and operate, and is supplied with a 9VDC mains adaptor and 1m Female to Male RF cable. LCD channel display.

- RCA AV & PAL antenna input
- PAL antenna output (TV)
- Channel adjustment (Up/Down key)



SPECIFICATIONS	LM-3880
Output	VHF: 2-4CH, S1-S11 UHF: 21-69CH (471.25-801.25MHz)
Power Cable Length	1.8m
Dimensions	140(L) x 82(W) x 30(H)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	LM-3880	\$49.95	\$44.90	\$39.90

## ANTENNA HARDWARE

### BARGEBOARD ANTENNA MOUNT - HOCKEY STICK

Simply bolt onto bargeboard (below gutter) . 1800mm long, galvanised steel construction. Mounting plate: 215 x 65mm

LT-3200

### U-CLAMP/V-BLOCK

For securely clamping mast sections, mounts, etc., at right angles.



LT-3235

	CAT.	Qty 1+	Qty 4+	Qty 10+
Hockey Stick Mount 1.8m	LT-3200	\$39.95	\$35.95	\$31.95
U Clamp V Block	LT-3235	\$4.50	\$3.95	\$3.60

### CARAVAN/RV (GENERAL PURPOSE) MAST

This unit in natural finish anodised aluminium is a telescopic mast suitable for TV and other antennas. It will extend to 1.5 metres in 3 sections. The top section is 27mm dia. which is compatible with almost all TV antenna mounting hardware. The bottom section is 35mm dia. which would easily be accommodated by U-bolt or other clamping hardware (not supplied). The top section has a sturdy cap & features a slot to neatly thread the coax lead down through the mast.

- Length extended: 1.5m

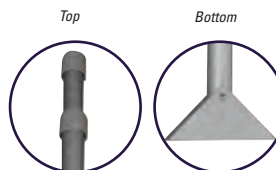


	CAT.	Qty 1+	Qty 4+	Qty 10+
Up to 1.5m	LT-3204	\$29.95	\$26.95	\$23.95

### TELESCOPIC ANTENNA MAST

With adjustable height and durable aluminium construction, this versatile telescopic antenna mast is suitable for just about any domestic application as well as marine and mobile use. It has a maximum height of 4.5 metres and includes a base mount and three guy wires for ensured stability.

- Suitable for multiple antenna use
- Easy installation & height adjustment
- 36mm diameter
- Maximum height 4.5 metres



**IDEAL FOR GREY NOMADS**



	CAT.	Qty 1+	Qty 4+	Qty 10+
Up to 4.5m	LT-3202	\$64.95	\$58.50	\$51.95

### DISEQC™ 1.2 MOTOR WITH METAL GEAR

DiSEqC™ (pronounced "Die-Sec") is the signal protocol used between a satellite receiver and a dish rotor. This DiSEqC™ motor connects to the output of an LNB and to the input of a DiSEqC™ receiver or interface box. When you select a different channel on your receiver, the motor rotates the dish to the correct satellite position so you get the best picture. The motor also supports receivers with Goto "X" function for manual position adjustment.



SPECIFICATIONS	LS-3330
Protocol	DiSEqC™ 1.2 & Goto "X"
Compatible Receiver	Receiver with DiSEqC™ 1.2 or Interface Box
Compatible Antenna Size	120c max.
Satellite Position	100 positions
Azimuth Angle	80° East - 80° West (160°)
Elevation Angle	25° - 75°
Speed	2.5"/second at 13V or 3.2"/second at 18V
Input/Output Voltage	13/18VDC
Dimensions (Mount)	345(L) x 168(H) x 110(D)mm



	CAT.	Qty 1+
	LS-3330	\$64.95



## Plasma / LCD / LED TV Wall Brackets:

We have celebrated the emancipation of new bracket designs by introducing a total new product range. Wall brackets for TVs & monitors have come down in price for 2 main reasons.

- Supply is no longer dominated by expensive European manufacturers
- The brackets no longer need to be made to hold 80kg+ CRT-type TVs.

Our range of universal TV and monitor brackets are easily strong enough to safely hold up any LCD, LED or even plasma TV safely. Indeed TVs are

in fact getting lighter and lighter.

These products have come a long way. Not only are they more versatile, most come with built-in bubble-type spirit levels to aid in successful installation.

- Models to suit Plasma/LCD/LED TVs from 13" - 80"
- VESA standard compliant
- Mounting hardware & instructions included
- Solid steel construction

### LCD MONITOR WALL BRACKET WITH CABLE MANAGEMENT

This full motion mount is able to tilt, swivel and rotate 360°. It features a cable routing management system and allows for an easy and fast installation with included hardware kit.

- Steel full motion flat panel mount
- Cable management system
- Easy and fast installation

SPECIFICATIONS		CW-2853			
Suits		13-27" flat panel TVs			
Tilt		-15°/+15°			
Swivel		60°			
Rotation		360°			
Max Loading		20kgs			
VESA		75x75, 100x100			
Distance To The Wall		80mm			



		CAT.	Qty 1+	Qty 5+	Qty 10+
13-27"	20kg	CW-2853	\$39.95	\$35.90	\$31.90

### LCD MONITOR SWING ARM WALL BRACKET

- Anti-theft full motion flat panel mounts
- Aluminium arms, plastic cover and cable management system
- Easy and fast installation



SPECIFICATIONS		CW-2851			
Suits		13-27" flat panel TVs			
Tilt		-15°/+15°			
Swivel		180°			
Rotation		360°			
Max Loading		20kgs			
Max VESA		75x75, 100x100mm			
Distance To The Wall		80-442mm			



		CAT.	Qty 1+	Qty 5+	Qty 10+
13-27"	20kg	CW-2851	\$49.95	\$44.90	\$39.90

### LCD MONITOR SWING ARM WALL BRACKET WITH TWO SLIDE-IN LOCKING PLATES

An adjustable LCD screen wall bracket, which you can tilt and swivel to get the best possible viewing angle. The industry standard VESA mount supports most LCD screens between 13-27" with a weight up to 15kg. A second wall bracket is supplied so you can easily relocate the TV from inside to the outside (or another room) of your home or caravan. Supplied with spirit level and mounting hardware.



SPECIFICATIONS		CW-2878			
Tilt Angle		+55° up to -35° down			
Swivel Angle		180° left & right			
Max. Weight		15kg (33lbs)			
VESA Mounting System		75x75, 100x100			
Extends		up to 382mm from wall			
Wall Bracket Dimensions		158(H) x 66(W)mm			

**GREAT FOR CARAVANS**



		CAT.	Qty 1+	Qty 5+	Qty 10+
13-27"		CW-2878	\$59.95	\$53.95	\$47.95

### ULTRA-THIN LCD TV WALL BRACKET

This economy TV wall bracket is only 22mm deep so your TV will sit closer to the wall than conventional brackets. The lateral shift allows for the TV to move for perfect placement. A quick-release design allows the TV to lock and unlock instantly from the wall plate. The bracket is designed for easy and fast installation. Mounting hardware is included, along with a bubble level to avoid your TV being mounted out of alignment. Universal & VESA compliance 200x200, 400x200, 400x400, 600x400



SPECIFICATIONS		CW-2882			
Suits		32-70" flat panel TVs			
Max loading		45kg			
Max VESA		600x400			
Distance to the wall		22mm			
TV mounting plate		640(W) x 400(H)mm			



		CAT.	Qty 1+	Qty 3+	Qty 6+
		CW-2882	\$29.95	\$26.95	\$23.95

### ECONOMY ULTRA-THIN LCD TV WALL BRACKET WITH 10° TILT

This economy TV wall bracket is only 22mm deep so your TV will sit closer to the wall than conventional brackets. The lateral shift allows for the TV to move for perfect placement. A quick-release design allows the TV to lock and unlock instantly from the wall plate. The bracket is designed for easy and fast installation. Mounting hardware is included, along with a bubble level to avoid your TV being mounted out of alignment. Universal & VESA compliance 200x200, 400x200, 400x400, 600x400.



SPECIFICATIONS		CW-2883			
Suits		32-70" flat panel TVs			
Tilt		10/0°			
Swivel		-			
Rotation		-			
Max loading		45kg			
Max VESA		600x400			
Distance to the wall		34mm			
TV mounting plate		640(W) x 400(H)mm			



		CAT.	Qty 1+	Qty 3+	Qty 6+
		CW-2883	\$39.95	\$35.95	\$31.95

### ADJUSTABLE LCD WALL BRACKET 23-55"

Designed for TVs from 23-55" in size that weigh up to 20kg. Adjustable height and quick release locking system to enable easy placement and removal of your TV from the bracket. Also features a spirit level built onto its Aluminium Frame.

- Type: Television
- Max Weight: 20kg
- Item Width: 46.2cm



		CAT.	Qty 1+	Qty 5+	Qty 10+
23-55"	20kg	CW-2864	\$44.95	\$40.45	\$35.95

## TV WALL BRACKETS (CONTINUED)

### ADJUSTABLE LCD WALL BRACKET 42-80"

Designed for TVs from 42-80" in size that weigh up to 30kg. Adjustable height and quick release locking system to enable easy placement and removal of your TV from the bracket. Also features a spirit level built onto it's Aluminium Frame.

- Type: Television
- Maximum Item Weight: 30kg
- Item Width: 86.2cm



		CAT.	Qty 1+	Qty 5+	Qty 10+
42-80"	30kg	CW-2865	\$54.95	\$49.45	\$43.95

### LCD MONITOR WALL MOUNT BRACKET WITH 15° TILT

- Universal tilting flat panel mount
- Cold rolled steel
- Easy and fast installation
- Angle free adjustment
- Lateral shift allows TV to move for perfect placement
- Spirit level



SPECIFICATIONS	CW-2866
Suits	23-37" flat panel TVs
Tilt	-15°/+15°
Max Loading	37kg
Max VESA	300x300
Distance To The Wall	63mm

		CAT.	Qty 1+	Qty 5+	Qty 10+
23-37"	37kg	CW-2866	\$34.95	\$31.45	\$27.90

### LCD MONITOR WALL MOUNT BRACKET WITH 180° SWIVEL

- Universal flat panel mount
- Cold rolled steel
- Easy and fast installation
- Ultra-thin design
- Lateral shift which allows TV to move for perfect placement
- Spirit level

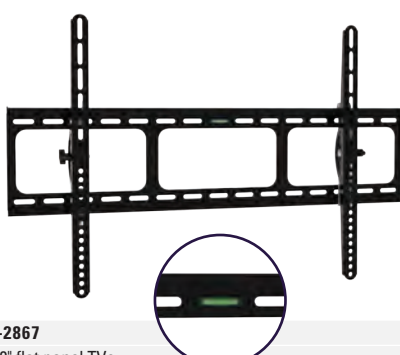


SPECIFICATIONS	CW-2868
Suits	23-55" flat panel TVs
Tilt	-10°/+5°
Swivel	180°
Max Loading	30kg
Max VESA	400x400
Distance To The Wall	43-502mm

		CAT.	Qty 1+	Qty 5+	Qty 10+
23-55"	30kg	CW-2868	\$79.95	\$71.95	\$63.95

### LCD MONITOR WALL MOUNT BRACKET WITH 10° TILT

- Universal flat panel mount
- Cold rolled steel
- Easy and fast installation
- Ultra-thin design
- Lateral shift which allows TV to move for perfect placement
- Spirit level



SPECIFICATIONS	CW-2867
Suits	42-80" flat panel TVs
Tilt	-10°/+10°
Max Loading	60kg
Max VESA	800x500
Distance To The Wall	43mm

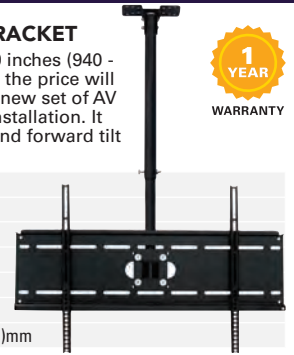
		CAT.	Qty 1+	Qty 5+	Qty 10+
42-80"	60kg	CW-2867	\$69.95	\$62.95	\$55.95

### CEILING MOUNT ADJUSTABLE BRACKET

Suits panel sizes from 37 inches up to 60 inches (940 - 1780mm) and weighing up to 80kg - and the price will leave plenty of room in the budget for a new set of AV cables and wall plates to complete the installation. It allows vertical extension up to 550mm and forward tilt up to 15 degrees.



SPECIFICATIONS	CW-2859
Suits	37"-70"
Tilt	-10°/+5°
Adjustable	380-620mm
Load	80kg
VESA	700 x 400
TV Mounting Plate	815(L) x 215(H) x 12(D)mm



		CAT.	Qty 1+	Qty 5+	Qty 10+
37-70"	80kg	CW-2859	\$99.95	\$89.95	\$79.95

### LCD MONITOR WALL MOUNT BRACKET WITH 180° SWIVEL

Suiting panel sizes from 32" up to 55" (810 - 1400mm) and weighing up to 55kg - and the price will leave plenty of room in the budget for a new set of AV cables and wall plates to complete the installation. The full motion ability allows extension up to 530mm, left/right swing up to 180° and forward tilt up to 15° so it is ideal for mounting in a corner or any other awkward position.

SPECIFICATIONS	CW-2861
Suits	32" - 55"
Tilt	-15°/+0°
Swivel	180°
Load	25kg
Vesa	600 x 400
Distance To The Wall	42-532mm
TV Mounting Plate	740(W) x 425(h) x 25(D)mm



		CAT.	Qty 1+	Qty 5+	Qty 10+
32-55"	25kg	CW-2861	\$119.00	\$106.95	\$94.95

### LCD MONITOR WALL MOUNT BRACKET WITH 180° SWIVEL

- Universal flat panel mount
- Cold rolled steel
- Easy and fast installation
- Ultra-thin design
- Lateral shift which allows TV to move for perfect placement
- Spirit level



SPECIFICATIONS	CW-2869
Suits	32-70" flat panel TVs
Tilt	-10°/+5°
Swivel	180°
Max Loading	35kg
Max VESA	600x400
Distance To The Wall	43-502mm

		CAT.	Qty 1+	Qty 5+	Qty 10+
32-70"	35kg	CW-2869	\$99.95	\$89.95	\$79.95

### LCD TV ADJUSTABLE CABLE HARNESS KIT

Designed to easily tether any flat panel screen to the wall to prevent tipping that can cause screen damage. Also helps to protect children and pets from harm. Ideal for panels on AV tables within arms reach or in high traffic areas. The kit comes with adjustable tension cables which can be set to the desired length and clamped to a wall.

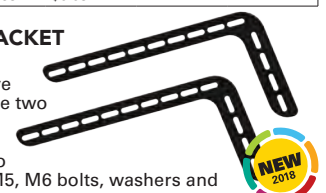
- Supplied with 2 x Wire Cables and 12 x Mounting Screws



	CAT.	Qty 1+
Pack of 2	CW-2854	\$9.95

### SOUNDBAR WALLMOUNT BRACKET

This versatile bracket set allows you to mount a soundbar or similar above your flat screen TV (or vice versa). The two brackets are made from high gauge cold rolled steel and will support loads up to 15kg. The kit includes two brackets and an assortment of M4, M5, M6 bolts, washers and nuts. Dimensions: 450(L) x 230(W)mm




	CAT.	Qty 1+	Qty 3+	Qty 6+
	CW-2881	\$24.95	\$22.45	\$19.95

## PROJECTOR MOUNTS

### EXTENDABLE UNIVERSAL PROJECTOR CEILING BRACKET

- Aluminium projector ceiling mount
- Fits most projectors

SPECIFICATIONS	CW-2857	WARRANTY			
Tilt	30				
Rotation	360°				
Height Adjust	240-310mm				
Max Loading	10kgs				
		CAT.	Qty 1+	Qty 5+	Qty 10+
		CW-2857	\$59.95	\$53.95	\$47.90



## CABLE MANAGEMENT

### CABLE MANAGEMENT STRIP FOR TV WALLMOUNTS

Get rid of unsightly cable arrangements with this stylish aluminium cable channel. Supplied with 4 mounting screws and 4 screw anchors, it will add a professional looking touch to your home cinema.

- Dimensions: 1000(L) x 60(W) x 20(H) mm

CAT.	Qty 1+	Qty 5+	Qty 10+
CW-2877	\$19.95	\$17.95	\$15.95



### CABLE MANAGEMENT SLEEVE

A flexible neoprene cable management sleeve for concealing all types of cables. Attach to a wall, behind a desk, under a TV or behind an entertainment unit. Then feed the wires through the sleeve holes and cut the sleeve to the desired length

- 2 x Hook and loop pieces with tape
- 1 x Cable management sleeve

Cables not included.

CAT.	Qty 1+
CW-2856	\$14.95



### HIDDEN CAVITY MEDIA HUB

Designed to be mounted in a cavity / stud wall, it has provision for up to five wall plates, or three wall plates and a small converter. Inside you can install whatever you need for HDMI connections, power points, antenna connections, or anything else you like. The cables are then fed through the hole in the front-plate for connection into your TV. It only protrudes from the wall by a few millimetres, so you could have it behind a flush-mounted TV and wouldn't even know it's there! Includes mounting hardware, just BYO wall plates and equipment. Note: GPO mains outlets should only be fitted using a licensed electrician.

- Holds up to 5 standard wall plates
- Dimensions: 285(W) x 250(H) x 70(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
CW-2879	\$89.95	\$80.95	\$71.95



## SCREEN MAINTENANCE

### LCD SCREEN CLEANING KIT

Keep your computer, TV and other LCD screens clean with this easy to use kit. Remove dust and fingerprints without streaking, scratching or staining. The special solution removes those greasy fingerprints and the elastic anti-static brush and scratch free microfibre cloth are excellent for eliminating dust and grime.

- Elastic anti-static Brush
- Drip-free cleaning solution
- Special microfibre material which is capable of preventing panel scratch and will not harm LCD protective coating

CAT.	Qty 1+	Qty 4+	Qty 10+
AR-1418	\$13.95	\$12.45	\$10.95



## SPEAKER BRACKETS

### ADJUSTABLE TILT & SWIVEL SPEAKER WALL BRACKETS

This two-piece swivel bracket is easy to install and is made of strong ABS plastic. Primarily designed for mounting small/medium sized speakers for surround sound setups or could easily be used for mounting security lights/ CCD Cameras.

- Tilt: -10°/+10°
- Swivel: -90°/+90°
- Max Load: 5kg
- Sold as a pair.

	CAT.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2803	\$14.95	\$13.45	\$11.95



### SPEAKER WALL BRACKETS

Ideal for mounting home cinema effects speakers.

- Made from high grade glass reinforced nylon
- Suits small to medium speakers up to 5kgs (11 pounds)
- Fully adjustable in all directions
- Supplied with a comprehensive range of fasteners for many speaker types
- Black in colour
- Sold as a pair

	CAT.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2820	\$24.95	\$22.35	\$19.70



### ADJUSTABLE WALL SPEAKER BRACKET

If your listening room is a bit short on real estate, the answer may be to mount your speakers on the wall with a set of brackets. These brackets can be adjusted horizontally, vertically to tilt up to 20° or to fit speakers up to a depth of 370mm and as small as 80mm. Ideal for conference rooms, AV rooms, studios or small rooms where space is limited. Supplied as a pair.

- Each bracket holds up to 20kg
- Fits speakers from 150mm wide, 80mm deep
- All steel construction
- Black powder coat finish
- All fittings and hardware included
- Sold as a pair *Limited Stock.*

	CAT.	Qty 1+	Qty 5+	Qty 10+
Pair	CW-2840	\$39.95	\$35.90	\$31.90



### CEILING / WALL SPEAKER BRACKET - STEEL

This sturdy bracket has main axis angle adjustment by a diecast, toothed plate secured by a wing nut. The detents won't slip as can happen with ball types. Minor axis adjustment is by a handwheel with backup by lock screw. As a safety measure a steel wire lanyard easily secures the two halves of the bracket - a good safety feature that is common in professional P.A. installations. The wall plate has holes for 4 x 6mm (or 1/4") screws. Another hole is provided for speaker wire egress. The speaker mounting plate has 4 x 4mm holes and also two slotted holes. Sold individually.

SPECIFICATIONS	CW-2841	
Max Speaker Box Weight	10kg	
Angle Variation	Main - over 180° Minor - 360°	
Wall Mount Plate	100(W) x 105(H) mm	 1 YEAR WARRANTY
Speaker Mount Plate	80(W) x 45(H) mm	
Distance From Speaker To Wall	135mm	



## Tech Talk: VESA Mounting Standard

The Video & Electronics Standard Association (VESA) has issued suggested standards for the attachment mounting systems for electronic visual displays also known as the Flat Display Mounting Interface. This is a family of standard defined by VESA for mounting flat panel monitors, TV's and other displays to stands or wall mounts, it is used on most modern flat-panel monitors and TV's. Whilst these standards are quite detailed the basic details of the standards involve the size of the display and the relevant spacing and sizing of the hole to mount the display. The dimensions vary from 75 x 75mm to 800 x 400mm.



## LAPEL MICROPHONES

### TIE CLASP MICROPHONE

Electret condenser tie clasp microphone. Supplied with alligator clip to attach to tie or shirt and 2 metres of cable to 3.5mm plug. Ideal for lectures, stage, video recorders etc.

SPECIFICATIONS	AM-4092			
Type	Electret condenser			
Polar Pattern	Cardioid			
Impedance	1kohm			
Sensitivity	-67dB $\pm$ 3dB @ 1kHz			
Frequency Response	20Hz - 16kHz			
Power Requirement	1.5VDC 0.7mA max			
Termination	2 metre cable, 3.5mm plug			
		1 YEAR WARRANTY		
CAT.	Qty 1+	Qty 4+	Qty 10+	
AM-4092	\$19.95	\$17.95	\$15.95	

### STEREO TIE CLASP MICROPHONE

This is a lightweight tie-clasp mic, ideal for interview / documentary style recording when you can "mic up". It features two uni-directional electret condenser pickups to provide a true stereo output too. A 2m cable to 3.5mm plug is provided too.

- Stereo output
- Low impedance

SPECIFICATIONS	AM-4131			
Frequency Response	100Hz - 16kHz			
Weight	30g			
Cable Length	2m			
		1 YEAR WARRANTY		
CAT.	Qty 1+	Qty 4+	Qty 10+	
Stereo AM-4131	\$24.95	\$22.45	\$19.95	

### STEREO LAPEL MICROPHONE WITH HEADPHONE SOCKET

Using a very clever design, this lapel microphone provides a 4-pin 3.5mm plug for connection to devices which use the port for headphone / microphone connections. It then provides a 3.5mm stereo socket to provide you with a headphone outlet, so you can still connect your favourite pair of headphones. Perfect for laptops, smartphones, and more. Microphone includes a carry pouch and tie clip.

#### Features:

- High quality omni-directional condenser
- Compatible with iPhone, iPad, iPod Touch, Samsung, and Windows Smartphones

SPECIFICATIONS	AM-4013			
Type	Condenser Microphone			
Polar Pattern	Omni-Directional			
Sensitivity	-30dB $\pm$ 2dB			
Frequency Range	35Hz - 18kHz			
Weight	10g			
Dimensions	130(W) x 90(H) x 30(D)mm			
		1 YEAR WARRANTY		
CAT.	Qty 1+	Qty 4+	Qty 10	
Stereo Lapel Microphone AM-4013	\$14.95	\$13.45	\$11.95	

### THRONMAX MDRILL DOME MICROPHONE

Improve your podcasting or audio recording with this fantastic USB microphone. Plug and play operation for most platforms, you'll be up and running in no time. Solid triple-layered grille for durability, mounted to an adjustable stand for optimum positioning. Wide frequency response (20Hz to 20kHz) and powerful 16-bit 48kHz sampling ensure fantastic quality sound. What's more is it includes a 3.5mm audio output for headphone monitoring, with adjustable level control. This is perfect for monitoring as you go. A 2m USB Type-C cable is provided for connection.

#### Features:

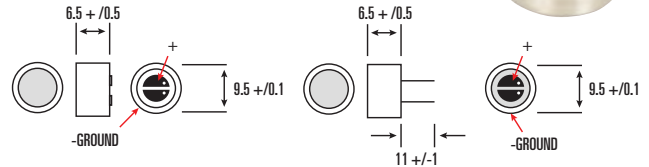
- Wide frequency response
- High sampling rate
- 3.5mm headphone monitoring output
- 670g
- 200(H) x 112(Dia.)mm (Including Stand)

SPECIFICATIONS	AM-4133			
Microphone				
Power	5V @ 200mA (USB Type-C)			
Sampling	48kHz / 16-bit			
Frequency Response	20Hz-20kHz			
Supports	Windows 7+, Max OS 10/7+, Sony Playstation 4			
		1 YEAR WARRANTY		
CAT.	Qty 1+	Qty 4+	Qty 10	
Thronmax Mdrill Dome AM-4133	\$129.00	\$115.95	\$102.95	

## MICROPHONE INSERTS

### MICROPHONE INSERTS

Replacement electret mic inserts for tape recorders and other low-cost microphones. Once power is supplied they work beautifully. For example, you can solder them to a PCB for a mic input. Used by OEM's. Omnidirectional.



SPECIFICATIONS		BOTH			
Power		1.5V - 10VDC			
Current Consumption		<0.5mA			
Frequency Range		50Hz - 16kHz			
Sensitivity		68dB +/- 3dB			
Output Impedance		<2.2k ohm			
S/N Ratio		>56dB			
Dimensions		9.7(Dia.) x 6.7mm (+/- 0.2mm)			
Pin Length (AM-4011)		10mm (+/- 0.5mm)			
		CAT.	Qty 1+	Qty 4+	Qty 10+
Standard	Without Pins	AM-4010	\$2.35	\$2.09	\$1.85
Standard	With Pins	AM-4011	\$2.35	\$2.09	\$1.85

## Tech Talk: Decibels

Contrary to much popular usage, the decibel (dB) is not actually a unit of any particular quantity, but rather an expression of the ratio between two quantities, such as, power, voltage, current, acoustic pressure. Many sensors, including our own ears, respond to stimuli in a logarithmic fashion, that is, an increase of 10dB Results in a doubling of loudness. This allows a huge range of intensities. As the dB compares the logarithmic quantities, it agrees with our perceptive comparisons. To calculate the ratio, in dB, of two power levels, P1 and P2, the formula is:  $dB = 10 \log (P1/P2)$  If the quantities are voltages, currents or sound pressure levels, X1 and X2, the formula becomes:  $dB = 20 \log (X1/X2)$  If the quantities X1 and X2 are both measured in the same impedances, their dB ratio will be numerically equal to the dB ratio of their equivalent powers. If their impedances Z1 and Z2 are unequal, the dB ratio of their power can be found from:  $dB = 20 \log (X1/X2) + 10 \log (Z2/Z1)$  Negative dB ratios will result when P1 (or X1) is less than P2 (or X2), while positive values indicate that P1 (or X1) is greater than P2 (or X2).




## WIRED MICROPHONES & ACCESSORIES

### UNIDIRECTIONAL DYNAMIC MICROPHONE

Dynamic, unidirectional microphone with an anti-pop grille, built-in on/off switch and a plastic finish.

- Fixed 3 metre lead with 6.5mm plug



SPECIFICATIONS		AM-4190			
Type	Unidirectional dynamic				
Frequency Response	50Hz - 13kHz				
Sensitivity	-50dB				
Output Impedance	600 ohm				
Termination	3 metre cable - 6.5mm plug				
		CAT.	Qty 1+	Qty 4+	Qty 10+
		AM-4190	\$9.95	\$8.75	\$7.75

### UNIDIRECTIONAL DYNAMIC MICROPHONE - XLR

Dynamic, unidirectional microphone with an anti-pop grille, built-in on/off switch and XLR termination.

- Supplied with a 3m XLR to 6.5mm plug cable.



SPECIFICATIONS		AM-4192		
Type	Unidirectional Dynamic			
Frequency Response	50Hz - 13Hz			
Sensitivity	-50dB			
Output Impedance	600 ohm			
Termination	3 metre cable - XLR plug			<div><div>1</div><div>YEAR</div></div> <div>WARRANTY</div>
CAT.		Qty 1+	Qty 4+	Qty 10+
AM-4192		\$14.95	\$13.35	\$11.70

### DYNAMIC UNIDIRECTIONAL PROFESSIONAL MICROPHONE

With professional styling, it features a cardioid polar pattern for reduced background noise and feedback. This microphone is ideal for use in theatres, nightclubs, public address systems and recording. Excellent frequency response and tough metal construction make this microphone great value.

- XLR termination
- With 6m XLR to 6.5mm plug cable



SPECIFICATIONS		AM-4099		
Type	Unidirectional, dynamic			
Polar Pattern	Cardioid			
Impedance	600Ω			
Sensitivity	-72dB ±3dB @ 1kHz			
Frequency Response	60Hz - 12kHz			
Termination	6 metre cable, 6.5mm plug			<div><div>1</div><div>YEAR</div></div> <div>WARRANTY</div>
CAT.		Qty 1+	Qty 4+	Qty 10+
AM-4099		\$29.95	\$26.95	\$23.95

### UNIDIRECTIONAL BALANCED PROFESSIONAL VOCAL DYNAMIC MICROPHONE

A top quality balanced mic suitable for singing and band work. Similar performance to those costing \$200 or more.

- With 6m XLR to 6.5mm plug cable
- Zinc-diecast, low impedance
- Compare with the Shure® SM58!



SPECIFICATIONS		AM-4096		1 YEAR WARRANTY
Type	Unidirectional, balanced dynamic			WARRANTY
Polar Pattern	Cardioid			
Impedance	500Ω			
Sensitivity	-76dB ±3dB @ 1kHz			
Frequency Response	40Hz - 17kHz			
Termination	6 metre cable, XLR			
	CAT.	Qty 1+	Qty 4+	Qty 10+
	AM-4096	\$44.95	\$40.45	\$35.95

See page 170 for Microphone Cables

### BOOM MICROPHONE STAND

Height adjustable with a boom that extends 600mm, so is suitable for vocals, overheads or micing up drum kits or pianos. Mic holder with 5/8" adaptor included.

- Steel construction
- Folds up to 850mm long



CAT.	Qty 1+	Qty 4+	Qty 10+
AM-4113	\$34.95	\$31.45	\$27.90

### DESK TOP MIC STAND

Designed for applications where you don't need a full-size mic stand. The build quality is excellent with diecast aluminium legs, steel column and padded feet.

- Adjustable up to a height of 200mm and folds up to 240mm long
- Includes mic holder with 5/8" adaptor



CAT.	Qty 1+	Qty 4+	Qty 10+
AM-4111	\$17.95	\$15.95	\$14.35

### EXPANDING MICROPHONE HOLDER

This expandable microphone holder will accept standard 22mm tapered microphones and will expand to accommodate larger diameter mics.

- Fitted with a 5/8" x 27 thread
- Black in colour



CAT.	Qty 1+	Qty 4+	Qty 10+
AM-4107	\$6.95	\$6.25	\$5.50

### GOOSENECK MOUNTING BASE

With 5/8" thread. Surface mountable for microphone & goosenecks.

- Solid metal construction
- Supplied with mounting screws
- Size 44mm base dia



CAT.	Qty 1+	Qty 4+	Qty 10+
AM-4130	\$5.95	\$5.25	\$4.75

### FLEXIBLE GOOSENECK

- Metal - 450mm long
- 5/8" male to 5/8" female fittings



CAT.	Qty 1+	Qty 4+	Qty 10+
AM-4127	\$14.95	\$13.35	\$11.70

### DJ GOOSENECK MICROPHONE

Connects directly to most mixing consoles to provide talkback or PA functionality. The XLR plug on the end plugs straight in, while the gooseneck allows for optimum positioning.

- Flexible gooseneck
- 3-pin XLR male connector
- Minimises feedback



SPECIFICATIONS	
Type	Dynamic
Cardioid Pattern:	Unidirectional
Frequency Response	50Hz - 10kHz
Impedance	500ohm
Sensitivity	76dB +/- 3dB
Connector	3 Pin male XLR
Weight	26g
Dimensions	500(L) x 110(W) x 35(D) mm

A black gooseneck microphone with a flexible gooseneck and a 3-pin male XLR connector. The microphone head is black with a silver-colored grille. The gooseneck is black with a silver-colored band near the head. The XLR connector is black with a silver-colored band.



## WIRELESS MICROPHONE SYSTEMS

### SINGLE CHANNEL WIRELESS UHF MICROPHONE

The microphone is supplied with a USB rechargeable battery pack or has an option to be powered by 2 x AA batteries (not included). The systems effective range is 50m on average, making it ideal for street announcers/performers, pubs, club functions, etc.



WARRANTY

SPECIFICATIONS	AM-4108
Frequency	525.5MHz
Frequency Response	60Hz - 13Hz
Transmission Range	Up to 50m
Mic Power Supply	1 x Rechargeable Battery Pack (3.7V 800mAh Li-ion), 2 x AA (not included)
Receiver Power Supply	6 x AAA (not included)
Dimensions	Microphone 235(L) x 52(Dia.)mm, Receiver 85(L) x 63(W) x 19(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Single Microphone	AM-4108	\$79.95	\$71.95	\$63.95

### UHF HEADSET MICROPHONE KIT

Using high quality UHF transmission between the headset and receiver, this kit provides you with great quality audio reproduction without wires. The receiver provides a simple 3.5mm AUX connection for a HiFi or PA system, with a variety of adaptors for maximum compatibility. The headset itself has no external pack - everything is contained right there within the headset itself. Fully rechargeable, you'll get 3-5hrs of talk time from a 2-3hr charge. The headset weighs just 44g, so is comfortable for use during extended periods too. If you prefer to hold the microphone, it's easily detached from the head bracket for that purpose as well. Simple to setup and easy to use for a variety of applications.

- Headset or handheld use
- Built-in rechargeable battery
- Lightweight construction



SPECIFICATIONS	AM-4051
Microphone	Unidirectional Condenser
Frequency Response	30Hz-23kHz
Output Impedance	≤2.2KΩ
Sensitivity	-41dB ± 1dB (0dB=1V/Pa)
Working / Charge Time	3-5hrs / 2-3hrs
Weight:	Sender: 25g Headset: 44g
Dimensions:	Sender: 65(D) x 33(W) x 15(H)mm Headset: 150(W) x 135(H) x 130(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10
UHF Headset Microphone Kit	AM-4051	\$79.95	\$71.95	\$63.95

### WIRELESS UHF MICROPHONE SYSTEM

These systems are a great way to add a wireless microphone to a PA system. XLR and 1/4" unbalanced outputs for use in any audio desk. The microphone itself has a power switch to save power, low battery indicator, and a classic metal-mesh finish. Ideal for schools, churches, weddings, gyms, karaoke etc.

- UHF Wireless
- Works with all PA Systems



WARRANTY

SPECIFICATIONS	AM-4119	AM-4132
Frequency	525.9MHz	Ch A 525.1 / Ch B 645.8MHz
Transmission Range		60m
Microphone Power		2 x AA Supplied
Pick Up		Dynamic
Dimensions - Microphone		236(L) x 52(Dia.) mm
Dimensions - Receiver		175(L) x 108(D) x 40(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10
Single Microphone System	AM-4119	\$99.95	\$89.95	\$79.95
Dual Microphone System	AM-4132	\$129.00	\$115.00	\$102.00
Channel A Hand-Held Microphone	AM-4115	\$54.95	\$49.45	\$43.95
Spare Headset Microphone Channel A	AM-4116	\$54.95	\$49.45	\$43.95
Channel B Hand-Held Microphone	AM-4117	\$54.95	\$49.45	\$43.95
Spare Headset Microphone Channel B	AM-4118	\$54.95	\$49.45	\$43.95

## MUSICAL INSTRUMENT INTERFACES

### USB MIDI INTERFACE CABLE

Connect any MIDI device to your computer: keyboards, controllers, instruments, sound cards, samplers, drum machines etc.

- Plug and play, no software or drivers required
- MIDI in and MIDI out connectors with LED indication
- Cable is 2 metres long



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
	XC-4934	\$29.95	\$26.90	\$23.70

### GUITAR LINK FOR SMARTPHONES

An easy-to-use adaptor that allows you to connect your electric or bass guitar, synthesizer, keyboard or similar instruments to an iPhone®, iPad® or iPod®. The built-in preamplifier boosts the signal, making it suitable for recording on your iOS® device (using the freely available App), or for connecting to an amplifier using the aux-out, which also accepts headphones if you want to play without disturbing the neighbours. The interface features 6.5mm (1/4") mono input and output jacks and a stereo 3.5mm (1/8") headphone/aux out jack. Using a freely available iOS® App you can record what you are playing to play back and share later.

- Requires 2 x AAA batteries
- Dimensions: 80(L) x 60(W) x 20(D)mm



WARRANTY

	CAT.	Qty 1+	Qty 4+	Qty 10+
	AM-2052	\$39.95	\$35.90	\$31.90

### 2 CHANNEL MIXER WITH MICROPHONE PREAMP

The preamplifier takes your standard microphone level and boosts it for compatibility with line-level inputs. It provides the option of independent channels (mic 1 to left, mic 2 to right output), or mixing (both inputs are mixed to left and right outputs). In either case there's adjustable volume control for both microphones. Extremely versatile with simple operation. RCA output and mains power supply included.

- 2 x microphone inputs (6.4mm)
- Volume control for each input
- Stereo RCA output
- Screw mount holes



SPECIFICATIONS	AM-4201
Power	12VDC @ 0.5A
Input Impedance	600Ω
Mic Pre-Amplifier Gain	50dB
Signal to Noise Ratio	80dB
Weight	207g
Dimensions	145(W) x 96(D) x 31(H)mm

	CAT.	Qty 1+	Qty 2+	Qty 4+
2 Channel Mixer with Mic Preamp	AM-4201	\$69.95	\$62.95	\$55.95



### DJ MIXER 3 CHANNEL

This compact 3-channel stereo DJ mixer will have you tearing up the vinyl to mix your own beats. Channels A and B provide line or phono level stereo inputs, with cross-fade support between the two channels. A CD-input stereo/mono selectable channel is also provided. 5-level volume indicators provide handy visual level reference, while a dedicated microphone input is provided for talk-over. Headphone output is provided with adjustable level out, and there's even a grounding point!

- 1/4" Headphone Socket
- Coloured LED Output Display
- RCA Input Sockets
- Photo / Line and CD Inputs
- 2 x Stereo Line Output



SPECIFICATIONS	AM-4207
Power	12VAC @ 300mA (Mains adaptor included)
Weight	780g
Dimensions	234(W) x 137(D) x 57(H)mm (Including Knobs/Sockets)

	CAT.	Qty 1+	Qty 4+	Qty 10+
DJ Mixer 3 Channel	AM-4207	\$59.95	\$53.95	\$47.95



## MEGAPHONES

### 10 WATT MEGAPHONE WITH SIREN

A compact yet powerful personal megaphone. Operation is simple; select speak with the switch, speak into the microphone, and it will amplify your voice. Adjustable volume level and in-built siren as well. Handle folds away for easier storage and transportation, and there's a wrist strap for safety (especially when standing above a crowd).



SPECIFICATIONS	AM-4041
Power Output	10W
Range	200m (Approx.)
Power Source	Requires 4 x C batteries
Battery Life	8-10hrs.
Microphone	Unidirectional
Weight	700g (Excluding batteries)
Dimensions	135(W) x 230(D) x 210(H)mm (Handle folded out)



	CAT.	Qty 1+	Qty 4+	Qty 10+
10W	AM-4041	\$34.95	\$30.95	\$27.95

### 25 WATT MEGAPHONE WITH SIREN

If you need to be heard in a crowd, this is a great way to do it. Totally portable using 8 x C batteries (not included) for approximately 8-hours of operation. The powerful 25W amplifier and horn speaker will help your message be heard up to 500m away! The microphone can detach from the back of the unit thanks to a curly cable, allowing you to hold the unit above your head (in a crowd), but still speak clearly into the microphone. A built-in siren generator is also included, which is sure to get you attention. The shoulder strap makes it easy to carry and trigger activation provides straight forward operation and power-saving while not in use.



SPECIFICATIONS	AM-4042
Max Output Power	25W
Power Source	Requires 8 x C batteries
Effective Distance	Up to 600m
Battery Life	Up to 6 hours
Microphone	Uni-Directional Dynamic
Weight	145kg (Excluding batteries)
Dimensions	240(W) x 355(D) x 270(H)mm (without microphone attached)



	CAT.	Qty 1+	Qty 4+	Qty 10+
25W	AM-4042	\$69.95	\$62.95	\$55.95

For PA Horn Speakers see page 291.

## WIRELESS PA SYSTEMS

### PORTABLE WIRELESS UHF MICROPHONE HEADSET SYSTEM

The ultimate in personal amplification. This ingenious unit combines an ultra lightweight rechargeable wireless headset, and a compact rechargeable amplifier. This means you're not tethered to your amplifier, and you can spruik your message for 12-18hrs! Ideal for trade shows, demonstrations, or anywhere you want to be heard! The 10W amplifier and speaker pairs with the microphone, but can also be used in MP3 mode to playback from a USB flash drive (not supplied). Recharge both units using the supplied adaptors, and you're ready to go again! Buttons and an LCD screen on the amplifier give you total control, while the microphone features onboard volume control too.

- UHF wireless microphone
- Fully rechargeable amplifier and microphone
- USB playback (BYO drive)



SPECIFICATIONS	AM-4053
Playback Time	12 - 18hrs (6-10hrs for MP3)
Recharge Time	3-5hrs
Amplifier Power	10W
Frequency Response	90Hz - 18kHz
Weight	253g
Dimensions	90(W) x 110(L) x 40(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AM-4053	\$99.95	\$89.95	\$79.95

### PORTABLE WIRELESS UHF PA SYSTEM WITH MICROPHONE

If you've ever wanted to shout a message to the world (who hasn't), here's your chance! Using a convenient wireless microphone and self-contained amplifier/controller. Not only will it amplify your voice, but stream music or backing tracks via Bluetooth® or audio cable. A USB port and MicroSD slot provide dual functions - either as an additional audio source, or to record the whole show! The amplifier/controller features a built-in rechargeable battery to keep it running for hours, and features full on-board control for playback, EQ, volume, and more.

- Quality UHF microphone
- USB/MicroSD recording
- Bluetooth® streaming
- Aux input
- EQ and built-in echo



SPECIFICATIONS	AM-4095
Output Power	30WRMS
Signal to Noise	>71dB
Frequency Response	20Hz - 20kHz
Weight	PA Systems: 2.9kg / Microphone: 245g
Remote Control	40g
Dimensions - PA System	260(W) x 290(h) x 130(D)mm
Dimensions - Microphone	245(H) x 48(Dia.)mm
Dimensions - Remote Control	146(H) x 45(W) x 15(D)mm



	CAT.	Qty 1+	Qty 4+	Qty 10+
	AM-4095	\$199.00	\$178.95	\$158.95

## PA SPEAKERS - ACTIVE

### 12" PORTABLE ACTIVE PA SPEAKER WITH UHF MICROPHONE

A powerful battery-powered all-in-one unit for parties, functions, and much more. It features a large 12" speaker and amplifier, as well as a range of input options. Play your backing tracks from a Bluetooth® source, auxiliary input, or use the built-in USB/SD card reader. An FM radio receiver is even included. The quality UHF microphone provides PA functionality, with its own level and reverb controls to mix it into the backing track playing. If you want to record a mix-down, the USB/SD card slots can be used for recording to your favourite media too. Control of inputs and playback is via the on-board control panel or included remote control, while a clear LCD provides information on current playback and settings. An LED light in the speaker box provides a little visual entertainment too. It's all contained into a robust unit on wheels, so it's ready to go anywhere.



SPECIFICATIONS	CS-2492
Output Power	40WRMS
Voltage	Mains powered
Frequency Response	60Hz - 20kHz
Sensitivity	≥71dB
FM Radio	87.5MHz - 108MHz
Charging Time	6-10hrs
Weight	11.3kg
Dimensions	350(W) x 630(H) x 325(D)mm (Handle not extended)



WARRANTY Bluetooth®

	CAT.	Qty 1+	Qty 4+	Qty 10
12"	Each	CS-2492	\$249.00	\$219.00

## NERD PERKS REWARDS CARD:

Join our loyalty program. Earn a point for every dollar spent at any Jaycar company owned store\* and be rewarded with a \$25 Jaycoins Card once you reach 500 points. Sign-up in store.

\* Conditions apply.



## ✓ PA SPEAKERS - ACTIVE

### 15" PORTABLE ACTIVE PA SPEAKER WITH TWO CHANNEL UHF MICS

A massive sound from a compact and versatile unit. A huge 300WRMS amplifier provides plenty of power to move the 15" woofer and large horn speaker. It includes two wireless microphones for MC/Karaoke. To keep the music pumping, connect your favourite music streaming source via Bluetooth®, or via a SD/USB. Playback controls and information are provided on the speaker. A line and external speaker output is provided for expansion also. Bass and treble controls accompany the master volume for fine tuning of your sound too. Everything is enclosed into a single heavy duty enclosure, with roller wheels on the back-side to assist with transport.



SPECIFICATIONS	CS-2491
Output Power	300W
Voltage	Mains powered
Frequency Response	40Hz - 20kHz
Sensitivity	98dB
Woofer	15"
Tweeter	34mm horn driver
Inputs	XLR / 1/4" Mic, XLR / RCA Line
Outputs	XLR Line Out, Speakon 8 Ω Speaker Out
Dimensions	470(W) x 712(H) x 415(D)mm



WARRANTY

Bluetooth®

		CAT.	Qty 1+	Qty 4+	Qty 10+
15"	Each	CS-2491	\$469.00	\$419.00	\$369.00

### 10" PORTABLE ACTIVE PA SPEAKER SYSTEM WITH 2 UHF MICROPHONES

This fully featured stereo PA system is made up of two 10" PA speakers with two powerful 50WRMS Class B amplifiers to drive them. All audio is managed through a comprehensive 8 channel audio mixer, and clear LCD. The mixer/amplifier is part of the main speaker during transport, but unclips when in use. The first 4 channels feature balanced/unbalanced inputs, bass/treble/volume, and an effects send through for the on-board digital effects processor. Channel 5/6 is a stereo unbalanced/RCA input, and channel 7/8 is a 3.5mm input. Phantom power is available on channels 1-4, and monitor/headphone pre-outs are provided too. A clear LCD provides feedback and control of SD/USB based playback, as well as Bluetooth® streaming from a compatible device. A remote control is also provided for reliable feedback of all operation.



SPECIFICATIONS	CS-2566
Output Power	100W (2 X 50W)
Voltage	Mains powered
Frequency Response	75Hz - 19Hz (-3dB)
Mixer Inputs	4 x Mono Mic/Line, 2 x Stereo
Audio Sources	USB / SD / Bluetooth® Input (Selectable)
Weight	18.5kg (Combined)
Dimensions	305(W) x 490(H) x 320(D)mm (each)



WARRANTY

Bluetooth®

		CAT.	Qty 1+	Qty 4+	Qty 10+
10"	Pair	CS-2566	\$549.00	\$489.00	\$439.00
Suitable Speaker Stand - Each		CS-2494	\$29.95	\$26.95	\$23.95

## ✓ STAGE EQUIPMENT

### PA SPEAKER STANDS

Lift your speakers up and over a crowd. These speaker stands have strong steel with rubber feet, and support speakers up to 50kg. Sold individually. Suits speakers with 35mm mounting hole.

Two models available:

#### SMALL

Height adjustable between 620mm & 1m

#### LARGE

Height adjustable between 1.1m & 1.9m



WARRANTY

SPECIFICATIONS	CS-2494	CS-2493
Height	620mm-1m adjustable	1.1-1.9m adjustable
Max Load	Up to 50kg	Up to 50kg
Weight	1.7kg	3.3kg
Dimensions	90(Dia.) x 620(H)mm (Folded)	130(Dia.) x 1.1(H)mm (Folded)

		CAT.	Qty 1+	Qty 4+	Qty 10+
Small	Each	CS-2494	\$29.95	\$26.95	\$23.95
Large	Each	CS-2493	\$49.95	\$44.95	\$39.95

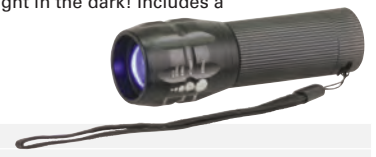
## ✓ EFFECTS LIGHTING

### 3W UV LIGHT WITH ADJUSTABLE LENS

Ultra powerful UV light with an adjustable beam. UV torches are especially useful for nightclubs and security checkpoints for confirming the validity of identification. This ultra-bright 3W LED puts out a huge amount of UV light, so it's also great for night games such as Spotlight in the dark! Includes a wrist-strap.

Features:

- Aluminium body
- Adjustable lens angle
- Ultra-bright 3W LED



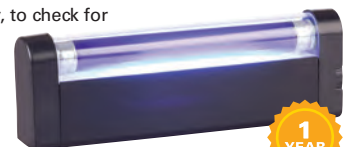
SPECIFICATIONS	ST-3446
LED Power	3W
Batteries	3 X AAA (not included)
Burn Time	12-hours
Light Distance	10m
Weight	120g
Dimensions	105(D) x 21(Dia.)mm

	CAT.	Qty 1+	Qty 5+	Qty 10
	ST-3446	\$14.95	\$13.45	\$11.95

### MINI ULTRA-VIOLET FLUORO LIGHT WITH TORCH

Use to detect counterfeit currency, to check for fake ID, gemstone and mineral inspection, or to just have fun by making objects glow. Includes small white spotlight.

- 4W UV lamp
- Hand carry strap
- Requires 4 x AA batteries
- Dimensions: 160(L) x 52(D) x 23(W)mm



WARRANTY

	CAT.	Qty 1+	Qty 5+	Qty 10+
	SL-3146	\$14.95	\$13.35	\$11.70

### 40 WATT BLACKLIGHT FLUORO TUBE

Used extensively for live music, discos, night clubs, and great for parties. At our new low prices, you can now afford them.

- Requires standard 40 Watt fluoro fitting
- Dimensions: 1225(L) x 25(Dia)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Each	SL-3152	\$19.95	\$17.95	\$15.95

## PARTY LIGHTING

### ROTATING DISCO BALL WITH LED SPOTLIGHTS

Create an amazing light show by hanging these lights on the ceiling to get the desired mood on your next party. Turn on and dance the night away with this brilliant mirror ball and LED spotlights station. It features an automatic rotating mirror ball, two adjustable angle spotlights with 6 red, green and blue LEDs each. It also has an additional 4 red and blue LEDs on the base for maximum effect.

- Mains power adaptor included
- Dimensions: 260(L) x 130(W) x 230(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
LED RGB	SL-2916	\$39.95	\$35.95	\$31.95

### MULTI-COLOURED LED DISCO BALL

In days gone by, a mirror ball and spotlights was the best way to light up a dancefloor. But this single, compact unit will achieve a similar effect with less fuss. Let the disco ball take care of the hard work, and automatically sync to your music. If you'd like to see something in particular, take over with the included remote control. Easy! It's sure to keep the dancefloor rocking (just BYO music).



SPECIFICATIONS	SL-3509
LEDs	Red, Green, Blue, Yellow, White, Purple
LED Power	3W (each)
Sync Modes	Sound, Automatic, Remote Override
Power	30W
Adaptor	100-240VAC @ 50/60Hz
Dimensions	190(Dia.) x 163(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
LED RGB	SL-3509	\$39.95	\$35.95	\$31.95

### 9W GALAXY MAGIC LED LIGHT WITH DMX

A LED moving stage light with 9 x 1W LED lights that produce 9 different colour combinations and effects. Select between automated colour patterns, sound activation or DMX controlled. Adjustable handle angle. Ideal for stage lighting, club and party applications. Comes with power supply & remote.



SPECIFICATIONS	SL-3484
Light Source	9 x 1W
Source Lifetime	Rated 200,000 hours
Power Supply	100-240V 50-60Hz
Rating Power	10W
DMX Channels	7
Play Mode	Auto, Sound Active, DMX512, Remote



	CAT.	Qty 1+	Qty 5+	Qty 10+
9 x 1W LEDs	SL-3484	\$79.95	\$71.95	\$63.95

### POWER LIGHT "PARTYBAR" KIT

This unit consists of a sturdy metal stand that deploys from 1.3m to a massive 2.15m (over 7 feet.) The light bar fits perpendicularly to the stand which holds 4 x gymbal mounted high efficiency multicolour par light units 250mm Dia. with 3 LED lamps in each. The entire system is connected together with leads (supplied) and connected to a foot-operated controller. Supplied with Mains (240V) connector, T-bar, stand, footswitch and carry bags.

- Ob-3 channel control & 15 DMX channels
- 12 built-in auto programs
- Easy trigger-music activated mode
- Easy to break down at end of gig
- Creates superb colour wash effects
- Variable flash rate
- Light bar dimensions: 910(L) x 242(H) x 48(D)mm



	CAT.	Qty 1+	Qty 5+
Party Light Bar Kit	SL-3469	\$299.00	\$269.00

### 18 X 1W RGB LED PAR STAGE LIGHT

Add some colour to your stage or next party with these par lights. Each light features super bright LEDs that can change colour between white, red, green and blue, which can be controlled using the built-in program, sound activation via the built-in microphone or from a DMX controller (available separately). The supplied bracket allows you to mount the light permanently or placed on a table for temporary use. Two models to choose from.

- DMX512 control
- Mains powered
- Fan cooled



ST-3602



SPECIFICATIONS	BOTH MODELS
LED Colours	Red, Blue, Green and White
Control Modes	Sound Activation, Built-in program, master-slave, Remote control
Dimensions	175(L) x 175(H) x 105(D)mm
Weight	930g

	CAT.	Qty 1+	Qty 5+	Qty 10+
18 x 1W LEDs	ST-3600	\$74.95	\$67.50	\$59.95
7 x 4W LEDs	ST-3602	\$119.00	\$106.95	\$94.95

### LIGHTING STAND

This strong and sturdy lighting stand will extend from a minimum height of 1,530mm to a maximum of 3,650mm and is designed to carry up to 20kgs on the square section cross tree. An integrated tripod support has collapsible legs that extend up to 750mm from the centre line of the stand, giving an overall base of 1,500mm which provides good stability even when the stand is fully extended. The cross tree has 4 bolts for attaching up to 8 Pin Spots or other attachments. The entire stand is finished in matt black.



1.5m

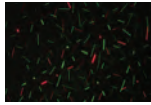
	CAT.	Qty 1+	Qty 4+	Qty 10+
	CL-2800	\$109.00	\$97.95	\$86.95



## LASER LIGHTS

### MINI STAGE LASER LIGHT WITH BATTERY

Now there's no excuse for a dull party! With a portable laser light show it's almost impossible to not have a great time! Ideal for backyard parties, temporary installations, or anywhere a laser light show would be fun.



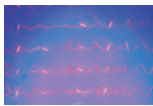
SPECIFICATIONS	SL-3450
Laser	Red 650nm 110mW, Green 532nm 50mW
Internal Battery	2800mAh
Burn Time	4-6hrs
Recharge Time	6-8hrs
Weight	280g
Dimensions	112(L) x 65(W) x 43(H)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Mini Laser	SL-3450	\$69.95	\$62.95	\$55.95

### RED/GREEN/BLUE MINI LASER LIGHT SHOW

A very compact unit, but houses three lasers - red, green, and blue. It creates an array of dazzling effects with 16 different display patterns, and can either run independently, or pick up on the beat of the music. Alternatively, use the included remote control to select the display pattern, speed, and modes. Mains power supply included, so you just plug and play!



SPECIFICATIONS	SL-3454
Laser Power Rating	Red: 100mW, Green: 40mW, Blue: 120mW
Weight	1kg
Dimensions	Dimensions 135(L) X 105(W) X 55(H)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Mini Laser RGB	SL-3454	\$169.00	\$151.95	\$134.95

### OUTDOOR LED & LASER LIGHT

Fairy lights are fun, but imagine at your next party your visitors arrive to a stunning laser show projected onto your house. It takes seconds to install, and is sure to get everyone in the partying mood! It combines a red and green laser with a high power LED for a stunning array of visual effects. It's also a great addition for festive lighting to help avoid any "dead areas" where you don't have other lights. Includes a remote control so it can easily be mounted out of reach if needed. It includes a mounting stand and garden spike, as well as a mains power adaptor.



Note: Garden spike also included.

SPECIFICATIONS	AL-3401
Laser Power	Red: 100mW, Green: 20mW
LED Power	3W
Power Consumption	16.8W
Weight	390g
Dimensions	155(D) x 87(Dia.)mm (Excluding Stand)



	CAT.	Qty 1+	Qty 5+	Qty 10+
Laser	SL-3401	\$79.95	\$71.95	\$63.95

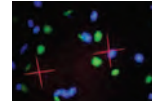


### Product Data:

We have so much data and fact sheets we cannot fit it all in our catalogue. Check out our website for over 4,000 pages of data!

### LED & LASER PARTY LIGHT WITH SOUND ACTIVATION

The best of both party-lighting worlds in one unit! Two high powered lasers (one red, one green), as well as 13 high powered LEDs. It produces stunning and mesmerising light shows that will dazzle, and keep the party rocking all night. It will automatically sync with the music, or take full control with the DMX throughput to really get things going!



SPECIFICATIONS	SL-3410
Lasers	Red: 100mW 650nm Green: 50mW 532nm
LEDs	Red, Green, Blue, Orange, White, Yellow
Dimensions	300(W) x 320(H) x 230(D)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
Laser + LED	SL-3410	\$249.00	\$219.00	\$199.00

### LED FESTIVE LOGO PROJECTOR

A fun way to theme your next festive event. The high powered LED projects the image onto any suitable surface. Includes 6 graphic plates to suit many occasions. Birthday Party, Happy Easter, Love, Happy New Year, Merry Christmas, and a flying witch for Halloween. It includes a baseplate and garden spike mounting option, and a mains power adaptor.



SPECIFICATIONS	SL-3402
LED Power	7W
Power Input	12VAC @ 1A (Mains Adaptor Included)
Total Power	10W
Waterproof	IP65
Weight	700g
Dimensions	140(W) x 180(D) x 170(H)mm

	CAT.	Qty 1+	Qty 5+	Qty 10+
	SL-3402	\$59.95	\$53.95	\$47.95

### RECTANGULAR STROBE LIGHT - 24 LED

This strobe light has super high intensity LEDs, that will add the necessary life to any party and produce an eye catching array of lighting effects to attract attention.

- Adjustable flash rate



	CAT.	Qty 1+	Qty 5+	Qty 10+
24 x White LEDs	SL-2895	\$19.95	\$17.70	\$15.70

### MINI STROBE LIGHT - XENON

This unit uses a xenon flash tube and has a variable flash rate up to 10Hz.

- Operates on 240 VAC
- Supplied with a 1.7m cable
- Domestic use only
- Dimensions: 85(W) x 50(H) x 125(D)mm



	CAT.	Qty 1+	Qty 5+	Qty 10+
Xenon	SL-2990	\$24.95	\$22.35	\$19.70

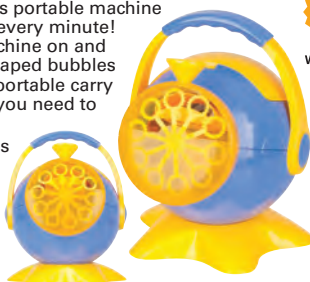
See page 135 for XENON Flash Tube

## BUBBLE & SNOW MAKERS

### BATTERY OPERATED PORTABLE BUBBLE MACHINE

Children love bubbles and this portable machine creates hundreds of bubbles every minute! Simply switch the bubble machine on and watch it blow plenty of fun shaped bubbles into the air. Complete with a portable carry handle, this is the only thing you need to bring to any party!

- Requires 4 x C-sized batteries (not included)
- Recommended Bubble Liquid - AB-1222 (available separately)



	CAT.	Qty 1+	Qty 4+	Qty 10+
Bubble Machine	AB-1224	\$29.95	\$26.95	\$23.95
946ml	AB-1222	\$6.95	\$6.25	\$5.50

### PROFESSIONAL MAINS OPERATED BUBBLE MACHINE

This powerful bubble machine will blow you away. At 20 rotations per minute, this party animal creates countless bubbles in the instant and won't stop until you pull the plug. Perfect for birthdays, parties, weddings or any occasions where you want lots of fun that you can see and touch.

- Carry handle with mounting hole for raining bubbles
- Mains powered
- Suitable Bubble Liquid: AB-1222



	CAT.	Qty 1+	Qty 4+	Qty 10+
Bubble Machine	AB-1229	\$59.95	\$53.95	\$47.95
946ml	AB-1222	\$6.95	\$6.25	\$5.50

### SNOW MACHINE 600W

While not technically a true "snow" machine, it does produce foamy flakes, that fall back down to the ground just like snowfall. Create a winter themed wonderland, or just add another dimension to your party! The light foamy flakes aren't frozen, so you can use this machine in any moderate temperature to produce the snowy effect. Includes a wireless remote control to control snow output.



SPECIFICATIONS	AF-1221
Power	20VAC @ 50/60Hz
Weight	2.7kg
Power Cable Length	1m
Dimensions	172(W) x 340(D) x 175(H)mm (including handle)



	CAT.	Qty 1+	Qty 4+	Qty 10+
Snow Machine	AF-1221	\$199.00	\$179.00	\$159.00
Snow Juice - 5L	AF-1222	\$24.95	\$22.45	\$19.95

### WATER BASED FOG MACHINE LIQUID 5 LITRE

A lack of fog is like having no bass, it's just no fun. This quality fog juice is water-based and non-toxic, and leaves no oily residue. Large 5L bottle for loads of fog!

- Unscented, environmentally friendly
- Safe, non-toxic, non-irritant, non-flammable
- Water based composition
- Leaves no oily residue

#### Caution:

- Keep out of reach of children
- Do not swallow
- Do not dilute or add any other fluids or substances
- Use fog generating machinery only in well ventilated areas, not for any other usage



	CAT.	Qty 1+	Qty 4+	Qty 10
Fog Machine Liquid 5 Litre	AF-1223	\$69.95	\$62.95	\$55.95

## SPECIAL EFFECTS

### 400W MINI FOG MACHINE

Fog machines provide an extra element for any party. Your party lighting instantly transforms from average lights to laser beams of fun. Watch the light beams dazzle through the fog while the music's playing. It features a remote control button to control fog output as needed.

- Fog juice sold separately (AF-1212)



SPECIFICATIONS	AF-1220
Volateg	240VAC @ 50/60Hz
Power	400W
Heat-up Time	3 minutes
Tank Capacity	0.3L
Spraying Distance	3.5m
Dimensions	110(W) x 250(D) x 110(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Mini Fog Machine	AF-1220	\$79.95	\$71.95	\$63.95
Fog Juice 1 Litre	AF-1212	\$17.95	\$15.95	\$14.35

### RAVE FOG MACHINE

This tough fog machine will add the extra dimension to any mobile DJ setup, home party or disco lighting - with laser light shows, mirror balls and other party lighting coming out in full effect. The unit produces clouds of white fog on demand with the use of an illuminated 3m wired remote control. Features an adjustable mounting bracket, tough metal construction and fluid gauge.

- 240VAC operation
- 70 cubic metres/min fog output
- 800ml fluid capacity
- 330(L) x 160(W) x 140(H)mm
- Fog juice sold separately (AF-1212)



	CAT.	Qty 1+	Qty 4+	Qty 10+
Fog Machine	AF-1214	\$149.00	\$133.95	\$118.95
Fog Juice 1 Litre	AF-1212	\$17.95	\$15.95	\$14.35

### STRAWBERRY ESSENCE SCENT FOR FOG MACHINES

Strawberry essence additive that provides a more desirable smell to your fog machine. Just add a few drops to the fog juice container on your fog machine, and hey presto, strawberry scented fog!



	CAT.	Qty 1+	Qty 4+	Qty 10+
20ml	AF-1211	\$19.95	\$17.95	\$15.95



### Smart Hardware Competition: - DAVID GORDON, SHOPS AT JAYCAR WOLLONGONG

"Project to control garden automation including pond pump, temp/humidity monitoring, soil moisture monitor and control of garden and via presence detection, shed lights."

## IN-CAR FM AUDIO TRANSMITTERS

### MP3 FM MODULATOR WITH REMOTE - 12/24V

Simply plug in to your cigarette lighter socket, this unit will play MP3 tracks directly through your car stereo through the FM band. Music can be stored on an SD/MMC card, USB memory stick or an external media player (iPods®, MP3 players) can be plugged in via the auxiliary input. It has a backlit LCD and a fully adjustable arm for multi angle viewing. It also remembers the last played frequency, song and volume.

- Accepts SD/MMC, USB or aux input
- FM Frequency: 87.5 to 108MHz
- 12V - 24VDC operation
- Supports folders
- Includes infrared remote control & 3.5mm AUX lead
- Dimensions: 130(L) x 40(W) x 25(H)mm



### FM TRANSMITTER WITH BLUETOOTH® TECHNOLOGY & 2.1A USB CHARGER

Allows you to transmit phone calls from a Bluetooth® enabled phone to your car's FM radio receiver. Features a 2.1A USB charging port and will also play audio via the external input socket or MP3 files stored on USB disk or SD card. Auto switch between music and phone calls. Powered by the vehicle lighter socket (12 or 24 volt).

- Frequency range: 87.5-108MHz
- Includes remote control



### CD/CASSETTE ADAPTOR

An alternative to using Bluetooth®. Play your portable CD or Smartphone through your car stereo cassette system. Using the headphone socket on your MP3 player or Smartphone.

- No power or batteries required
- Supplied with 1.1 metre lead & 3.5mm stereo plug



CAT.	Qty 1+	Qty 3+	Qty 6+
AR-1760	\$16.95	\$14.95	\$13.35

### VISOR MOUNT RECHARGEABLE BLUETOOTH® HANDSFREE SYSTEM

Add the safety and convenience of Bluetooth® to a vehicle that doesn't have it from the factory. Attaches to your sunvisor for convenient operation and optimum microphone/speaker location. Supports up to two phones with auto power-off when Bluetooth® connection is lost (ie, when you walk away from the car with your phone). Internal rechargeable battery with up to 30-days standby time. Added safety with great convenience.

#### Features:

- Bluetooth® 4.0
- Digital power amplifier
- Rechargeable battery
- 30 days standby on full charge
- Connect two phones simultaneously
- Turns off automatically when no Bluetooth® connection detected
- Voice answer
- Noise reduction microphone
- Turns on automatically when car door is opened/shut



SPECIFICATIONS	AR-3138
Output Power	2W
Charging Voltage	5VDC
SNR	>70dB
Frequency Response	180Hz - 16kHz
Distortion	0.5%
Impedance	8ohm
Battery	3.7V @ 600mAh rechargeable Lithium
Weight	93g
Dimensions	115(H) x 60(W) x 48(W)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Visor Mount Bluetooth	AR-3138	\$69.95	\$62.95	\$55.95

## IN-CAR BLUETOOTH® TRANSMITTERS

### BLUETOOTH® IN-CAR EARPIECE WITH USB CHARGER

This Bluetooth® unit is tiny and smart. It connects to your Bluetooth® enabled smart device, then sits in your ear like a small earphone to provide hands free communication. It weighs in at just 5g, and features the simplest recharging we've seen. No fumbling with tiny cables, simply push it into the supplied cigarette lighter adaptor. Small magnets will hold it onto the charger but enable quick release when you need it. One 2.1A and one 1A charging ports are included on the charger, to power and recharge your devices.

- Magnetic charging dock - no cables!
- Includes cigarette lighter adaptor
- USB 2.1A and 1A charging ports



SPECIFICATIONS	AR-3135
Earpiece Weight	5g
USB Charging Current	2.1A @ 5VDC, 1A @ 5VDC
Dimensions	23(W) x 26(H) x 27(D)mm (earpiece) 90(L) x 32(Dia.)mm (charger)

	CAT.	Qty 1+	Qty 3+	Qty 6+
In-Car Earpiece	AR-3135	\$29.95	\$26.95	\$23.95

### SMARTPHONE MEDIA BUTTON

Great for the car, gym or around the house. Sync with your Bluetooth® enabled device for volume, play/pause, and next/previous track control. Extremely light and compact.

- Plug and Play
- Bluetooth® Standards
- Supplied with steering wheel mount



SPECIFICATIONS	AR-3137
Active Range	40m
Battery	CR2016 3V
Dimensions	35(Dia.) x 8(H)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
AR-3137	\$24.95	\$22.45	\$19.95

### MINI BLUETOOTH® RECEIVER WITH USB CHARGING

This ingenious device provides Bluetooth® audio streaming on Hi-Fi and other audio playback devices without native Bluetooth®. The receiver recharges using the included USB recharge dock, then plugs into your 3.5mm audio socket. Then you simply pair your streaming device to the dongle and it's as if you connected a 3.5mm audio cable (but there's nothing to trip over!). The dongle itself includes playback controls, as well as a microphone, meaning you can use it as a full function hands-free device if you are paired with a smartphone. When it's running low on battery, simply pop it back into the USB charger and connect to a USB port to charge.



SPECIFICATIONS	AA-2105
Bluetooth® Distance	8m
Battery Capacity	100mAh 3.7V
Charging Time	2.5hrs
Talk Time	About 3hrs
Music Playing Time	Up to 5hrs
Standby Time	20hrs
Working Interface	3.5mm Line Level Audio
Weight	26g
Dimensions	63(D) x 30(Dia.)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
AA-2105	\$29.95	\$26.95	\$23.95

## NOT SURE WHAT TO BUY?

Give a Jaycar Gift Card and let them choose!







## ✓ IN-CAR HANDSFREE KITS

### CAR SMARTPHONE CHARGER HOLDER WITH DUAL USB AND CIGARETTE LIGHTER SOCKET

This is genius! It plugs straight into your cigarette lighter socket to provide a phone holder, as well as two high-power USB charging outlets (up to 4.8A combined)! What's more is it doesn't even use the cigarette lighter socket, providing you with another one too! The flexible gooseneck allows you to position the phone conveniently, and adjusts to firmly hold just about any phone size. It works with 12 and 24V systems, so suitable for trucks too! It even includes a microUSB charging cable, but you can bring your own for other devices as well.

#### Features:

- 360° rotation
- Dual USB charger
- Suitable for phones with 4- 6.3" screen

SPECIFICATIONS	HS-9017
Output	Dual USB 5VDC, 4.8A Max.
Input	12-24VDC
Phone Suitability	44 - 90mm Wide, 113 - 168mm High
Weight	26g
Dimensions	210(H) x 190(W) x 95(D)mm

CAT.	Qty 1+	Qty 5+	Qty 10
HS-9017	\$24.95	\$22.45	\$19.95



## ✓ IN-CAR MOUNTING BRACKETS

### GOOSENECK WINDSCREEN OR CIGARETTE LIGHTER UNIVERSAL MOUNT

Mounting your GPS/PDA/Mobile phone where it can obstruct your vision is very dangerous. With this handy dooberlacky, you can either plug into your cigarette lighter socket or mount it on the windscreen glass. The gooseneck allows it to be mounted where it won't obstruct your vision. The bracket adjusts to fit your device and can be rotated through 180° to accommodate wider devices, such as larger GPS units. The cigarette lighter mount has a piggyback socket so you can use the outlet to power your device.

- Base diameter: 67mm
- Gooseneck: 180mm long

Note: Mobile phone not included.

CAT.	Qty 1+	Qty 3+	Qty 6+
HS-9002	\$34.95	\$31.45	\$27.95



### PHONE HOLDER - AIR VENT MAGNETIC

This simple device allows you to easily hold your smartphone in a convenient position (for use when safely parked of course). The mount itself simply slips firmly onto the grilles of your air-vents. You then have two options: use the small (40mm Dia.) adhesive mounting plate, or slip the 40 x 60mm mounting plate inside your protective case. Both mounting places are just a fraction of a millimetre thick and weigh barely 1 gram, so you won't even notice it's there. Then by simply putting your phone close to the magnetic holder, it will firmly snap into place. Simply pull to remove! No clips, cradles, or other inconveniences. The magnetic mount itself is also rubber-moulded so the strong magnet won't scratch your phone (or phone case). Product may differ slightly to one shown.

Note: iPhone not included.



SPECIFICATIONS	HS-9057
Adhesive Mounting Plate	40(Dia.)mm
Non-Adhesive Mounting Plate	40(W) x 80(H)mm
Dimensions	44(Dia.) x 37(D)mm, 32g

CAT.	Qty 1+	Qty 3+	Qty 6+
HS-9057	\$19.95	\$17.95	\$15.95



## MAGNETIC MOBILE PHONE HOLDERS

No more adjusting clamps or clips with these magnetic mobile phone holders! The high strength magnet holds the phone in place allowing for quick placement and removal. Available in three versions with a suction or adhesive mount for the vehicle, all versions include an adjustable ball joint so you can tilt the phone to the optimal viewing angle. Suction mount models also include metal plates for attaching to phones without a non-magnetic housing. Plates are also thin enough to be inserted between phone and an existing protective case.

### SHORT ARM SUCTION MOUNT HS-9054

- Mounts the phone close to the suction cup
- 60mm arm length
- 65mm diameter suction cup

### LONG ARM SUCTION MOUNT HS-9055

- Extends the phone away from the suction cup
- 160mm flexible arm length
- 65mm diameter suction cup

### MINI BALL JOINT ADHESIVE MOUNT HS-9056

- Attaches unobtrusively to most surfaces
- 3M brand adhesive on ball joint base and magnet
- 30mm mount height
- 25mm diameter base

Smartphone not included.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Small	HS-9054	\$19.95	\$17.95	\$15.95
Large	HS-9055	\$19.95	\$17.95	\$15.95
Magnetic Dash Phone Holder	HS-9056	\$19.95	\$17.95	\$15.95

## SPRING CLAMP SUCTION MOUNT PHONE HOLDER

Suits virtually any smartphone, and securely mounts to your windscreen or other non-porous flat surface with a super strong suction cup. The bracket adjusts to firmly hold your phone in place. The ballhead allows total 360° rotation. Bracket adjusts between 55 and 80mm.

- High strength suction cup
- Universal phone compatibility
- 360° rotation
- Weight: 65g
- Dimensions: 125(L) x 75(W) x 95(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Suction Mount Phone Holder	HS-9039	\$19.95	\$17.95	\$15.95

## UNIVERSAL DASH & WINDSCREEN PHONE HOLDERS WITH STICKY GRIP

A quick, easy and secure way to hold your Smartphone as you drive. The special green silicon gel sticky material holds your phone in place so there's no need for custom phone bracket holders, working by sticking to the smooth surface of your Smartphone/device. It's so fast too, just press your phone onto the sticky pad, and that's it! The sticky pad doesn't leave any residue, and if it gets dirty it can be cleaned with water to return to an as-new state. Easy!

### STICKY DASH / VENT MOUNT HS-9050

Mounting is via a short dash mount suction bracket that has soft silicon gel, which can stick to almost any dash material, even textured vinyl. Also includes an air vent mount.

### WINDSCREEN MOUNT HS-9052

Includes a suction cup bracket that attaches to your windscreen, with an adjustable gooseneck arm to move your phone into position. The sticky phone end can also be rotated for portrait or landscape view. Note: May not work with some phone covers. Requires a smooth, hard finish for the sticky to work.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Sticky Dash / Vent Mount	HS-9050	\$17.95	\$16.10	\$14.35
Windscreen Mount	HS-9052	\$17.95	\$16.10	\$14.35

## IN-CAR MOUNTING BRACKETS (CONTINUED)

### SMARTPHONE WATERPROOF CASE WITH WINDSCREEN & BIKE MOUNT

Keep your phone secured and protected but accessible while mountain biking, boating or for other outdoor activities. It will accommodate an iPhone® or Samsung Galaxy S3® with the use of a specially designed adaptor. The front of the case uses a flexible transparent rubber covering while the rear also has a clear rear cover for your camera. A 3.5mm cable connects to the phone inside and provides a socket so you can connect headphones while the phone is in the case. IPX8 waterproof design so will protect the device inside when fully submerged down to a 1m depth. Includes: IPX8 case, suction glass mount bracket and handle bar mount bracket.

- 3.5mm internal cable to allow the use of headphones
- Compatible with: Samsung Galaxy S3®, iPhone 5®, 4G, 4Gs, 3G, 3Gs, 2G and the iPod® Touch and mobile
- Dimensions: 170(L) x 86(W) x 22(H)mm

Note: iPhone® not included.



	CAT.	Qty 1+
IPX8	HS-9023	\$14.95

### 12VDC CHARGER CRADLE FOR IPHONE® 3/4

Holds and charges your iPhone® as you drive. The holder plugs directly into the car cigarette lighter and has charging cradles to suit both iPhone® generations and a universal holder for other types of mobile phones. The iPhone® cradle doubles as a protector case whilst out and about and docks securely into the holder bracket when you get back in the car.

- Power: 12VDC
- Includes a case/cradle for both iPhone® 3 & 4

Note: iPhone® not included.



	CAT.	Qty 1+
Charging Cradle	HS-9012	\$3.95

### 2M AUXILLARY EXTENSION CABLE WITH MOUNT

Avoid having to reach behind your desk, TV cabinet, or Hi-Fi system just to connect your audio cable. This universal stereo 3.5mm adaptor can be used for inputs (such as your iPod to an AUX input) or outputs (such as the headphone output). Simply plug and play, and optionally fasten the bulkhead for extra security. Works with mono input/outputs also. Plug and play.

#### Features:

- 3.5mm plug to 3.5mm socket
- Socket enclosed in mount
- 2m long



	CAT.	Qty 1+	Qty 3+	Qty 6+
	AA-0411	\$9.95	\$8.95	\$7.95

### 2M AUXILLARY & USB EXTENSION CABLE WITH MOUNT

This is a very handy device to make connections easier. It can be attached to a computer, Hi-Fi system, or anything else you can think of. It has no electronics inside, providing full throughput with no power requirements. A 2m cable connects the USB and 3.5mm plugs to the sockets, which are mounted into a single enclosure with a bracket included. This provides you with flush-mount and surface-mount options, while a dust-cap is included to help keep dust out while not in use.

#### Features:

- 3.5mm plug to 3.5mm socket
- USB plug to USB socket
- 2m long
- Dust cap included



	CAT.	Qty 1+	Qty 3+	Qty 6+
	AA-0412	\$14.95	\$13.45	\$11.95

### UNIVERSAL TABLET HEADREST MOUNT

Almost totally universal to fit any car and any tablet (well, just about). It will fit headrests with support posts between 40mm and 170mm apart (basically any car). You can then install your tablet between 120 and 195mm high (that's a lot of tablets too). Tighten all the adjustable components and your tablet is held firmly in place with the padded, non-slip clamps. You can rotate the tablet 360° thanks to a strong ball-joint, and also tilt/swivel the tablet approximately 60° to your liking.

- Padded clamps to protect your device
- 360° rotating ball-joint
- Fits just about any vehicle



SPECIFICATIONS	HS-9033
Clamp Height	120 - 195mm adjustable
Headrest Compatibility	40 - 170mm wide
Weight	185g

	CAT.	Qty 1+	Qty 3+	Qty 6+
	HS-9033	\$19.95	\$17.95	\$15.95

### TABLET HOLDER WITH HEAVY DUTY SUCTION MOUNT

Designed to be fixed in one position but can be easily adjusted if necessary, this holder will accommodate a variety of different sized Smartphones and Tablets for your car, truck, or van. The adjustable holder sits on a lockable ball joint for angular adjustments to get the perfect viewing angle. The holding vice (sides and bottom) can be slid out of their grooves and moved to a wide or narrow grip. Vertical height can be lowered or raised and the main arm can be locked at specific vertical angles. Features a suction mount for an extremely tight grip on a window or dash surface.

- Compatible with iPad®, Android®, surface Tablets
- Dimensions: 190(H) x 140(L) x 140(W)mm

Note: iPad® not included.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	HS-9036	\$39.95	\$35.95	\$31.95

### UNIVERSAL TABLET HOLDER WITH HEAVY DUTY SUCTION MOUNT

Uses an extremely tough suction mount with a heavy duty adjustable gooseneck connected to a locking ball joint. The Tablet holder grip can be made wide or narrow by changing the grooves they're slid into. For a semi-permanent solution for Tablet access in a car, truck, or caravan this solution is ideal.

- Suitable for iPad®, Android® and surface Tablets
- Gooseneck 239(L) x 110(Dia.)mm
- Holder 185(H) x 165(L) x 135(W)mm

Note: iPad® not included.



	CAT.	Qty 1+	Qty 3+	Qty 6+
	HS-9034	\$34.95	\$31.45	\$27.95



### Smart Hardware Competition: - RYAN BERREY, SHOPS AT JAYCAR CLARKSON

"I designed and 3d printed a tank which connects to your pc over wifi and has nightvision. It is controlled using a ps4 controller. It was made using a jaycar 3d printer and a raspberry pi."



## RESPONSE Marine Audio:

Jaycar has been selling direct-import audio products for almost 30 years. In that time we have sold tens of thousands of general, Hi-Fi and car sound speakers, Home Cinema products, MP3 players, and thousands of car and marine head units. We have developed an expertise with specialty buying staff and long-term relationships with factories that we can trust. In these pages you will find products that are not national brand names (Many of the factories that we use actually make a lot of the national brand names, but we are legally prevented from telling you who they are). When Jaycar negotiates with a factory, we specify what we think is useful to you and what is rubbish (like rainbow coloured lighting displays). In buying such products from us, you get the same (or better) warranties, but the bonus sensible-specification products from a firm with a strong engineering background.

### IN-DASH MARINE AM/FM RADIO WITH MP3 PLAYER

An attractive marine radio perfect for your boat but can be used for automotive purposes. In addition to standard AM/FM radio the front panel includes USB & SD card slots which allow playback of MP3s. There's also a 3.5mm auxiliary port so you can connect an iPod®, headphones, or Smartphone for playing back music. The unit can be controlled with the infrared remote or front panel interface. For audio tinkerers, a myriad of settings are available including bass, treble, balance, and fade settings. There are also rock, pop, and classical equalisation pre-sets to suit your taste in music. Installation is straightforward, just connect via the supplied 14pin plug, all speaker cables are labelled to streamline the install. The USB, SD card and AUX sockets all come with splashproof silicone covers.

- MP3/USB/SD Player
- Rust-resistant chassis
- ISO/DIN mountable
- Electric Detachable Panel
- UV-resistant faceplate and trim ring
- 3.5mm front panel aux input
- USB/SD front panel input
- Wireless infrared remote
- Power: 8.25WRMS - 8 Ohm x 4
- 13WRMS - 4 Ohm x 4
- Dimensions: 189(L) x 117(W) x 57(H)mm

Waterproof cover also available - QM-3819.



WARRANTY

QM-3819



QM-3815

CAN BE USED FOR AUTOMOTIVE PURPOSES



## RESPONSE

	CAT.	Qty 1+	Qty 2+	Qty 4+
Marine Radio	QM-3815	\$99.95	\$89.95	\$79.95
Waterproof Cover	QM-3819	\$14.95	\$13.45	\$11.95

### 5" & 6.5" MARINE COAXIAL SPEAKERS

A pair of marine worthy speakers designed to withstand the demands of ocean use and provide excellent audio quality in your boat. Both models feature high salt and UV resistance and are fully splash proof thanks to the special indented design.



WARRANTY



## RESPONSE

SPECIFICATIONS	CS-2410	CS-2412
Frequency	80-20KHz	65-20KHz
Sensitivity	88dB/W/M	89dB/W/M
Max Power	100W	120W
Magnet	5.3oz	10oz
Voice Coil	25mm	25mm
Impedance	4 ohms	4 ohms
Woofers	Injection Cone	Injection Cone
Midrange And Tweeter	30mm Mylar Dome Tweeter	35mm Mylar Dome Tweeter
Dimensions:	A=150mm, B=135mm, C=111mm, D=45mm	A=180mm, B=164mm, C=128mm, D=60mm
See page 456 for chart		



		CAT.	Qty 1+	Qty 4+	Qty 10+
5"	Pair	CS-2410	\$34.95	\$31.45	\$27.90
6.5"	Pair	CS-2412	\$44.95	\$40.45	\$35.90

## ✓ MARINE RADIO & SPEAKER PACKAGES

### PACKAGE #1

- Combines our Marine Radio (QM-5815) with our 5" Marine Speakers. (CS-2410)



## RESPONSE

	CAT.	Qty 1+
Marine Radio & 5" Speakers	QM-3816	\$109.00

### PACKAGE #2

- Combines our Marine Radio (QM-5815) and our 6.5" Marine Speakers. (CS-2412)



## RESPONSE

	CAT.	Qty 1+
Marine Radio & 6.5" Speakers	QM-3817	\$119.00



### Smart Hardware Competition:

- JOHN LOCK, SHOPS AT JAYCAR WARNERS BAY

"I call it my Bluetooth speaker on steroids It was built mostly from stuff I had laying around. It's built in an old roadcase and runs off a car battery with a smart charger running a Sony headunit with a separate Bluetooth receiver, amplified am/FM antenna, USB charging 10" 250W Venom subwoofer on a response amp 2 6\*9 speakers and external speaker outs. The next step is to put solar recharging so when it goes camping it lasts longer than a couple of days."



## CAR ANTENNA HARDWARE

### STANDARD LOCKDOWN

- 4 section
- Extends to 770mm
- Cable length 1.2 metre



CAT.	Qty 1+	Qty 4+	Qty 10+
AR-3250	\$8.95	\$7.95	\$6.95

### RUBBER TOPMOUNT

- Small rubber antenna bends when it hits something.
- Good for 4WDs etc
- 1 section
- Length 350mm
- Cable length 1.2 metre



CAT.	Qty 1+	Qty 4+	Qty 10+
AR-3260	\$18.00	\$15.95	\$14.35

### CAR AERIAL EXTENSION

- Need a longer aerial lead in your car? 3m long.
- Standard aerial socket to plug



CAT.	Qty 1+	Qty 4+	Qty 10+
AR-3253	\$8.95	\$7.95	\$6.95

### CAR RADIO ANTENNA LINE PLUG

- Solder type
- Standard antenna plug

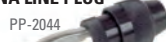


CAT.	Qty 1+	Qty 4+	Qty 10+
PP-2040	\$1.65	\$1.45	\$1.30

### CAR RADIO ANTENNA LINE PLUGS

#### SOLDERLESS CAR RADIO ANTENNA LINE PLUG

Replacement or connector for new antenna installation.



#### CAR RADIO ANTENNA LINE PLUG

- Solder type with plastic strain relief



CAT.	Qty 1+	Qty 4+	Qty 10+
Solderless PP-2044	\$2.95	\$2.60	\$2.30
Solder type PP-2041	\$2.50	\$2.21	\$1.95

### SOLDERLESS CAR RADIO INLINE SOCKET



CAT.	Qty 1+	Qty 4+	Qty 10+
PS-2046	\$3.95	\$3.45	\$3.15

### CAR RADIO ANTENNA ADAPTOR PLUG

Converts Motorola to European style antenna sockets.



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-2048	\$4.95	\$4.45	\$3.90

### CAR RADIO ANTENNA ADAPTOR PLUG

Converts European style antenna plug to Motorola style antenna plug.



CAT.	Qty 1+	Qty 4+	Qty 10+
PA-2038	\$4.95	\$4.45	\$3.90

## Acoustic Sound Absorbing & Deadening:

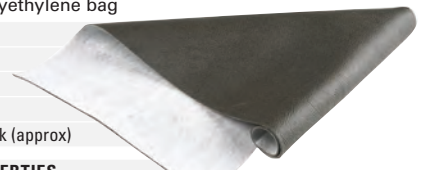
Ideal for car sound installations. One of the most hostile environments for a loudspeaker is in the door of a car. It is made out of flexible sheet steel which, when it is not vibrating & absorbing energy by rattling or buzzing, is reflecting energy all over the place! To produce Hi-Fi sound in a car you not only need to control the acoustics of the car environment. As any professional will tell you, it's the installation which makes for sound quality more than any other factor.

### HEAVY DUTY SOUND BARRIER DAMPING MATERIAL

This is basically a flexible plastic-like material that forms an attenuating / reflecting sound barrier. The product is made of 25% PVC loaded and spread evenly with barium mineral powder which takes up the other 75% (by weight) of the product. The barium mineral is very heavy and makes the vinyl heavy and impenetrable to sound waves. It's sort of like if lead was plastic! It weighs 4kgs per square metre. It is ideal for any surface that needs to be 'deadened' e.g. car door or floor panels. It completely damps (ie prevents) any panel resonating from high power speakers. It is also amazing for attenuating road noise from steel car floors, etc. It can be cut with a hobby knife or good scissors etc. The material is held in place with spray or gel contact cement. One sheet is generally enough for the average car door. Supplied in a polyethylene bag

SPECIFICATIONS	AX-3680
Sound Transmission Class	26
Humidity	Unaffected
Stability	Indefinite
Sheet	700 x 330 x 2.3mm thick (approx)

CHEMICAL RESISTANCE	MECHANICAL PROPERTIES
Petrol/Diesel Moderate	Density 1.74 g/cm3
Acetone Good	Tensile 3000N/50mm
10% HCl Good	Elongation <0.2%
10% NaOH Poor	Working Temp 0°C to 95°C

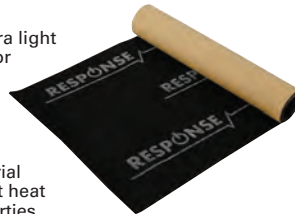


	CAT.	Qty 1+	Qty 4+	Qty 10+
Per Sheet	AX-3680	\$13.95	\$12.55	\$11.15

### SELF-ADHESIVE SOUND ABSORBING FOAM

The perfect ultra light weight insulator to use in conjunction with AX-3687. This durable crush and tear-resistant material has the highest heat blocking properties available in a single layer synthetic foam-type material. Not affected by oil and does not absorb water. It provides acoustic isolation and excellent thermal insulation for roof, firewall, floor, quarter panels, doors and even as an under bonnet liner. Adhesive backed for easy installation.

- Dimensions: 660 x 330mm / Thickness: 5mm
- Temperature range: -15 - 100°C



### COMBINATION BUTYL/FOAM SUPER SOUND DEADENER

Consisting of a layer of our AX-3687 Butyl Based sound deadener and a 3.0mm thick layer of honeycomb foam (similar to our AX-3662), lining the cabin of your vehicle with these sound deadening sheets will give you drastically reduced road noise, less panel vibration and a cooler cabin temperature. Application is easy with the self adhesive backing and ability to mould to the shape of the panel. Ideal for door skins, head linings, door cards and under bonnet insulation.

- Dimensions: 660 x 330mm / Thickness: 4.5mm (1.5mm butyl, 3.0mm foam)
- Temperature range: -10 - 100°C



CAT.	Qty 1+	Qty 4+	Qty 10+
Sheet AX-3662	\$14.95	\$13.35	\$11.70

### BUTYL BASED SOUND DEADENING MATERIAL

By adding weight to the metal panels of your car, such as door skins, boot lids, quarter panels, etc, you can stop nasty vibrations, reduce road noise, and give your doors and boot a nice solid "thud" when they shut. Each sheet is self-adhesive, and can be easily moulded, cut and stuck onto virtually any metal surface of your vehicle's body, giving you a pleasant, quiet and comfortable ride. Combine with our AX-3662 Sound Absorbing foam to add thermal insulation and eliminate low frequency humming from big exhaust systems for an even more comfortable vehicle interior.

- Dimensions: 900 x 330mm / Thickness: 1.5mm
- Temperature range: -10 - 110°C

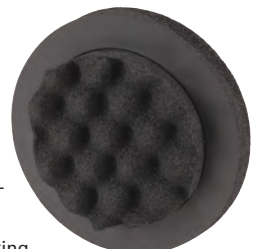


CAT.	Qty 1+	Qty 4+	Qty 10+
Sheet AX-3689	\$29.95	\$26.95	\$23.95

### SOUND RING - SPEAKER SINGLE DOOR KIT

Sound rings help optimise sound waves and prevent losses inside the door cavity. They're easily installed and will improve the sound of factory and after-market speakers.

- Foam
- 3M adhesive backing
- Outer ring and inner Circle



SPECIFICATIONS	AX-3667
Weight	37g (Per Ring)
Dimensions	Ring: 195(Dia.) x 25(D)mm Hole Circle: 140(Dia.) x 45(D)mm

CAT.	Qty 1+	Qty 4+	Qty 10+
AX-3667	\$39.95	\$35.95	\$31.95



## Response Car Speakers:

Low cost doesn't mean low quality. Coax speakers are an ideal replacement for the standard speakers you get in the average car. All are equipped with titanium coated fibre woofers and silk dome tweeters for smooth high frequency response. Sold as a pair.

4" COAX 2 WAY



CS-2310

5" COAX 2 WAY



CS-2312

6.5" COAX 2 WAY



CS-2314

6 X 9" COAX 2 WAY



CS-2316

SPECIFICATIONS	CS-2310	CS-2312	CS-2314	CS-2316
Power Handling	15WRMS	17WRMS	22WRMS	27WRMS
Nominal Impedance	4Ω	4Ω	4Ω	4Ω
Frequency Response	90Hz - 18kHz	70Hz - 18kHz	60Hz - 20kHz	55Hz - 18kHz
Sensitivity	83dB SPL @1W, 1m	85dB SPL @1W, 1m	88dB SPL @1W, 1m	86dB SPL @1W, 1m
Qms	3.2	4.28	4.88	4.76
Qes	1.85	1.88	1.5	1.57
Qts	1.18	1.31	1.15	1.18
Vas	1.45 litres	3.31 litres	10.18 litres	17.3 litres
Fo	122Hz	106Hz	75Hz	61Hz



WARRANTY

A	B	C	D(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
102	115	93	42	CS-2310	\$34.95	\$30.95	\$27.95
130	138	115	44	CS-2312	\$39.95	\$35.95	\$31.95
166	158	142	52	CS-2314	\$49.95	\$44.95	\$39.95
236 x 165	205	218 x 148	75	CS-2316	\$69.95	\$62.95	\$55.95

## Response Precision Kevlar Coaxial Car Speakers:

These are our ever popular Response Precision Kevlar Coaxial Speakers that have won many awards and magazine recommendations in the past, only with a new look. The Kevlar speaker cone is now supplied in Black but it still retains its outstanding performance that we are all accustomed to. The tweeters are still the original soft dome tweeter that provide clean, crisp sounds and maintains a natural and smooth balanced sound; nestled in an adjustable bracket for optimal sound trajectory. Virtually unchanged in design and performance, we have put our efforts in changing one thing; the price. Now at a more competitive price points; these coaxial speakers are great value for money topped with award winning performance. Sold as a pair.

## RESPONSE



All models are paired with Soft Dome Tweeters!

4" KEVLAR/DOME TWEETER 2 WAY



CS-2400

5" KEVLAR/DOME TWEETER 2 WAY



CS-2401

6.5" KEVLAR/DOME TWEETER 2 WAY



CS-2402

SPECIFICATIONS	CS-2400	CS-2401	CS-2402
Power Handling	40WRMS	50WRMS	75WRMS
Nominal Impedance	4Ω	4Ω	4Ω
Frequency Response	90Hz - 20kHz	60Hz - 20kHz	65Hz - 20kHz
Sensitivity	88.5dB SPL @ 2.83V, 1m	89dB SPL @ 1W, 1m	89dB SPL @ 1W, 1m
Qms	5.478	5.6	6.423
Qes	0.935	0.652	1.108
Qts	0.798	0.584	0.945
Vas	3.079 litres	7.87 litres	9.208 litres
Fo	91.97Hz	68.5Hz	71Hz



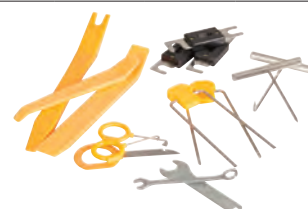
WARRANTY

A	B	C	D(mm)	CAT.	Qty 1+	Qty 4+	Qty 10+
102	90	47	45	CS-2400	\$89.95	\$80.95	\$71.95
130	118	64	60	CS-2401	\$119.00	\$106.95	\$94.95
178	157	135	65	CS-2402	\$139.00	\$124.95	\$110.95

### 12 PIECE AUDIO AND INTERIOR REMOVAL KIT

Those of us, who have installed a pair of speakers or a head unit, know how difficult it can be to get the door panels and centre consoles off without scratching them. By using the right tools the job is made much easier! This set of pry bars allow you to remove all the panels including those upholstery clips. They are made of ABS plastic and are extremely sturdy. This professional kit includes 12 distinctive tools designed to suit any car model.

CAT.	Qty 1+	Qty 4+	Qty 10+
TH-2339	\$19.95	\$17.95	\$15.70



## ACTIVE SUBWOOFERS

### CAR BOOM BOX WITH AMPLIFIER

Get the party started wherever you are! This amazing boom box feature mains power, as well as 12V power. That means the same great sound can be enjoyed at home, in the car, even a campsite using a battery! It has a fantastic 6" woofer and powerful tweeter, for great overall sound. You can play your favourite music source using the various inputs: RCA or 3.5mm (analogue stereo), USB flash drive, or a MicroSD card slot. If that's not enough, Bluetooth® streaming is provided! There's onboard audio controls, as well as a convenient remote control included.

- Stereo RCA line-in
- 6" subwoofer
- 1200 watts PMPO output
- USB & microSD card input
- Carry handle
- FM radio
- Remote control

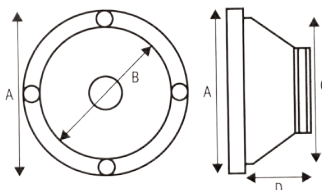


SPECIFICATIONS	QM-3410
Power	12VDC
Frequency Response	50Hz - 200kHz
Impedance	4"
Weight	2kg
Dimensions	400(W) x 220(H) x 195(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Car Boom Box with Amplifier	QM-3410	\$59.95	\$53.95	\$47.95

## Tech Talk: Notes About Speaker Specifications

- In an effort to assist customers choices between speakers, our entire speaker range have been assessed and measured under the same test conditions. Therefore making the resulting data in this catalogue comparable.
- All drivers have been measured for Thiele and Small parameters after a period of "Breaking In" for a minimum of 15 hours, and not tested straight off the shelf. This ensures a more long term and realistic result.



- A = From one side to the other
- B = Mounting Holes - Diagonal
- C = Cut Out in millimetres
- D = Depth

## CAR AUDIO ACCESSORIES

### LINE LEVEL CONTROL (ATTENUATOR)

This unit when fitted in a signal line allows you to adjust downwards excessive signal levels. You may have, for example a source from a CD/MP3 player and a tuner. Often one source is too loud (at line level) to the other.

- Stereo
- RCA line sockets in/out
- Dimensions: 60(L) x 55(W) x 37(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-3078	\$9.95	\$8.75	\$7.75

### CAR RADIO SUPPRESSOR

Traditional condenser type.



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-3060	\$3.95	\$3.45	\$3.15

## GROUND LOOP ISOLATORS

### GROUND LOOP ISOLATOR (STEREO) 3.5MM

Used to eliminate ground loop problems in audio installations. The unit has a 3.5mm stereo sockets on both ends. Suitable for use with laptops, mp3 players, iPods® etc. Note: Units AA-3074/78/84 & 86 can be fastened to any surface, fitting etc by simple cable ties.



CAT.	Qty 1+	Qty 4+	Qty 10
AA-3086	\$10.95	\$9.85	\$8.75

### GROUND LOOP ISOLATOR (STEREO) RCA

Used to eliminate ground loop problems (usually manifested as a low hum) in audio connections. The earthing brown ground wires sometimes helps even more.



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-3084	\$9.95	\$8.75	\$7.75

### SPEAKER (HIGH LEVEL) TO LINE LEVEL CONVERTER

Converts high level (high power) speaker signals back down to low level (i.e. line or <1volt signals). You can then use those signals as line inputs to amps without potential damage to amps or other speakers. Features variable attenuators to reduce signal up to 6 times.

- RCA socket out (stereo)
- External dimensions: 90(L) x 35(H) x 57(W)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
AA-0482	\$14.95	\$13.35	\$11.70

## CAR NOISE FILTER

### 10A DC NOISE FILTER

Arrests any noise on the DC power supply to car stereos, CBs etc better than ever. Most importantly it enables the installer to mount the unit without drilling mounting holes. You can secure this unit with cable ties. It will also "saddle" on a wiring loom if necessary. Has 10A rated + & - DC leads & separate earth lead which should be terminated to chassis.

- Dimensions: 90(L) x 60(W) x 33(H)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
10A	\$14.95	\$13.35	\$11.70

## Tech Talk: Car Noise Filters

Car noise filters or hot line filters are used to reduce noise and interference entering your car stereo through the power lead. The car alternator is one of the most common sources of problems, and these essential devices can help to reduce this.

## Tech Talk: DIY Car Installation

When it comes to DIY car installation Jaycar carries the best range of accessories and wiring materials around. For example, we have automotive wiring from 3A rating up to hundreds of amps. We have circuit breakers, terminal boxes, sound insulation, tools - well, everything! It would be really worth your while to have a comprehensive read. You will be staggered by our range of products!



## CAR ACCESSORIES

### AMPLIFIER REMOTE SIGNAL SWITCHER

This device connects to the speaker output of your car's head unit or amplifier. Once it detects that there is audio playing it triggers a relay so you can trigger other audio components, including an amplifier or CD stacker.

- It features a 2-3 second delay to help avoid any turn-on pop in aftermarket amplifiers
- Dimensions: 58(L) x 45(W) x 28(D)mm



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 3+	Qty 6+
AA-0419	\$9.95	\$8.75	\$7.75

### 2 CHANNEL LINE LEVEL CONVERTER

Connects to the speaker output of your car's head unit and converts the high level speaker output to a high quality line level output for the aftermarket car amplifier. This device boosts the output signal up to 10V RMS (Peak); an improved signal quality less prone to interferences and produces better quality and powerful sound. It also provides a remote output to turn on the amplifier and other audio components. It features a Molex plug that makes the whole installation process quite easy.

- Super low distortion
- Adjustable output step down
- Adjustable line level output up to 10V
- Quick auto signal sense turn on
- Remote output trigger
- Dimensions: 120(W) x 76(H) x 26(D)mm



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 3+	Qty 6+
AA-0416	\$29.95	\$26.95	\$23.70

### 4 CHANNEL HIGH QUALITY LINE LEVEL CONVERTER

An improved speaker to line level converter solution over the low cost and poor performance transformer type. This premium 4 channel LOC offers low distortion and exceptional power handling of up to 150W. Individual output gain controls are available and has a remote output for amplifier trigger. Uses a Molex plug and wiring harness for quick and simple installation.

- Super low distortion
- Adjustable output
- 150W Maximum input
- Remote output trigger
- Dimensions: 93(W) x 105(H) x 29(D)mm



1 YEAR WARRANTY

CAT.	Qty 1+	Qty 3+	Qty 6+
AA-0418	\$39.95	\$35.90	\$31.90

### QUICK RELEASE CAR AUDIO POWER CONNECTOR

Designed to offer safe and fast removal of your high power car audio, secondary battery or other high current DC set up. Acts as a heavy duty quick release plug and socket that connects positive, negative and remote wires. It has two components - one end to connect to your equipment and the other to your power source. Capable of handling up to 140A. Comes with a bracket for secure mounting.

- Dimensions: 62(L) x 48(W) x 31(D)mm



CAT.	Qty 1+	Qty 4+	Qty 10+
HC-4067	\$29.95	\$26.95	\$23.70

### CAR AMPLIFIER WIRING KIT

A complete 8G wiring kit for installing an amplifier into your vehicle. Save money over buying the individual components and ensure you have all the parts for installation. Everything you need, down to the cable ties and screws.

#### Contents:

- 6m x 8G power cables
- 9m x 16G speaker wire
- 5.2m stereo RCA interconnect
- 5.2m 18G remote wire
- Gold plated fuse holder
- 40A fuse
- Loom tubing, gold plated crimp connectors, grommets, cable ties, and self-tapping screws



CAT.	Qty 1+	Qty 4+	Qty 10+
AA-0442	\$64.95	\$58.50	\$51.95

## MONITORS

### 7" TFT LCD WIDESCREEN COLOUR MONITOR WITH IR REMOTE

This 7" TFT Widescreen LCD Monitor delivers high resolution pictures in widescreen format and clear sound reproduction through its inbuilt speaker. It is extremely lightweight and is suitable for all sorts of mobile and fixed monitoring applications. Suitable for in-car and home entertainment, use it to watch DVDs, PS2®, XBOX®, etc. can be used for monitoring or surveillance purposes.

Two RCA composite video inputs and one audio input are provided for a multi source system. This is truly a versatile monitor, it has low power consumption, wide viewing angle, and is NTSC and PAL compatible. It is equipped with On Screen Display enabling the user to easily control the colour, contrast, hue, brightness, and volume. A very slim and small infrared remote control is included.

It has reverse image capability adjustable by pressing a button. The mirror-image function on this unit makes it ideal for buses with a camera to view behind while reversing. Unit comes with an adjustable swivel bracket with double sided tape for adhesion on clean flat surfaces. A 4 pin mini din to 2 RCA and power cable is also supplied.

\*Works with most, but not all widescreen sources. Will default to modified widescreen in some cases.



1 YEAR WARRANTY

SPECIFICATIONS	QM-3752
System	NTSC/PAL
Power Input	12-24VDC
Power Consumption	10W
Screen Size	7inch (diagonal width)
Display Method	TFT Active Matrix System
Resolution	1140(h) x 234(v)



IDEAL FOR TRUCKS

### WIRELESS STEREO HEADPHONES TO SUIT

Add a pair of wireless headphones and enjoy automotive bliss. Soft cushioned earpads for comfort, switchable between channel A & B.

SPECIFICATIONS	AA-2047
Driver Diameter	27mm
Nominal Impedance	32 ohms
Frequency Response	120Hz - 20kHz
Sensitivity	100dB



	CAT.	Qty 1+	Qty 2+	Qty 4+
7" Colour Monitor	QM-3752	\$119.00	\$106.95	\$94.95
Wireless Headphones suit QM-3752	AA-2047	\$39.95	\$35.90	\$31.90

### 9" HIGH RESOLUTION AUTO LCD MONITOR WITH HDMI INPUT - 12/24V

Ideal for the car or truck this 9" display monitor supplied with anti-glare shield to improve visibility during daylight. It incorporates composite RCA and HDMI inputs making it an ideal monitor solution for security, reversing or multimedia entertainment. Supplied with power cable and user manual.

1 YEAR WARRANTY



SPECIFICATIONS	QM-3874
Screen Size	9"
Screen Ratio	16:9
Resolution	RGB 800 x 480
Backlight	LED, 250cd/m2
Contrast	500/1
View Angle	Up 50°, Down 70°, Left 70°, Right 70°
System	NTSC & PAL (Auto switch)
OSD Control	Brightness, Contrast, Colour, Volume
Power	12-24VDC, 7W
AV Input	2 way video input, 2 way audio input
HDMI Input	1 x HDMI input (including audio)
Dimensions	240(W) x 163(H) x 26(D)mm



	CAT.	Qty 1+	Qty 2+	Qty 4+
9" Colour Monitor with HDMI	QM-3874	\$219.00	\$196.95	\$174.95





# Outdoors, Gadgets & Fun



## OUTDOOR:

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## FUN & GAMES:

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## FANS

### 12VDC OSCILLATING FANS

Keep cool in the stifling heat. If you need some extra air circulation in your car or truck grab one of these fans, mount it, and away you go. The models just connect to your cigarette lighter socket for power. The on/off switchbox includes screw mounting holes to give your installation a more permanent look. Clamp & suction mount bracket versions available.



SPECIFICATIONS	ALL MODELS	
Power	12VDC	
Dimensions	180(Dia.) x 145(D)mm; 200(Dia.) x 150(D)mm (GH-1402)	<b>1 YEAR WARRANTY</b>
Switch	On/off oscillating switch	
Cable Length	2m	

	CAT.	Qty 1+	Qty 3+	Qty 6+
6" with Clamp	GH-1400	\$29.95	\$26.95	\$23.95
6" with Suction Mount	GH-1399	\$29.95	\$26.95	\$23.95
8" with Clamp	GH-1402	\$39.95	\$35.95	\$31.95

### DUAL 4" FANS WITH CLAMP - 12VDC

No more hogging the cool breeze! Dual fans means you can both keep cool. Individual adjustment so you can point them precisely where you want to. Multi-speed control, 12VDC powered, with a 2m cigarette lighter cable provided.

- Dimensions: 268(W) x 235(H) x 145(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	GH-1403	\$39.95	\$35.95	\$31.95

### 4" SUPER-COMPACT MINI FAN "KATABAT"

The 4" fan produces a surprising amount of cooling air but only has a table footprint of only 110 x 35mm. It is self-sustained using a rechargeable Li-ion 18650 3.7V battery. No cords needed, a USB recharger is included with the product. It comes with a hook to hang it up and even has an LED which can be used as a torch. More useful is the fact that small as it is, it has a 3-speed fan button! Unbelievable!

- Dimensions: 140(H) x 110(W) x 35(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Black	GH-1286	\$16.95	\$15.25	\$13.55
White	GH-1289	\$16.95	\$15.25	\$13.55

### MINI RECHARGEABLE FAN WITH CLAMP MOUNT

This fan is very similar to our GH-1286 4" clamp fan, but it is completely portable. It has no cords as it runs on a Li-ion 18650 battery, like the 'Katabat' super compact fan. That's right, you charge it via USB with the lead supplied, (but no actual charger.) This model features a wonderful gymbal mount so that you can point the fan in any direction.

- Available in blue/white only
- Clamp will open to 30mm
- Fan housing 130mm, overall 220mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Rechargeable	GH-1291	\$24.95	\$22.45	\$19.95

### DELUXE WATER MISTING FAN

Be cool and comfortable while outdoors with this personal water mister and fan in one. It is handy and portable with a moulded hand grip and trigger pump for ease of use. Powerful enough to provide a significant amount of breeze but safe enough for the kids to use with soft blades. Great for use while camping, at the beach, or at sporting events etc.

- Use as a water misting fan, stand alone fan or stand alone mister
- Requires 2 x AA batteries
- Dimensions: 270(H) x 70(Dia.)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Misting Fan	GH-1071	\$12.95	\$11.65	\$10.35

### 14" AC/DC RECHARGEABLE OSCILLATING FAN

Keeping cool has never been easier, and this fan will work even when the power's out! It recharges from mains power, but the rechargeable battery means it will work when the power's out, or you can take it somewhere with no mains power too. The large blades push plenty of air, and you can select from low/high power settings. There's also a 10 LED white light built-in, and it even includes a moulded handle for easy carrying. Mains and car chargers included.

#### Features:

- AC/DC Rechargeable
- LED Light
- Includes 12VDC Adaptor



	CAT.	Qty 1+	Qty 3+	Qty 6+
	GH-1294	\$99.95	\$89.95	
Spare Battery	GH-1281	\$14.95	\$13.45	\$11.95

## FOOD & BEVERAGE ACCESSORIES

### 12V CAR KETTLE

Now you can stop, revive, survive anywhere. An ideal travelling companion for those who spend a lot of their time on the road. Simply plug into your car's cigarette lighter socket, mount to your car's interior and boil away. Holds up to 550ml and makes up to 4 cups of tea, coffee, soup or any other hot beverage. Note that this device is not the same as your domestic kettle which consumes much more power so boiling times will be longer.

- 2 cups, strainer & mounting bracket included
- Approx boiling times  
300ml - 15min 500ml - 28min
- Dimensions: 235(H) x 95(Dia.)mm

Be prepared for a wait for your cuppa! It takes a LONG TIME for 12 Volts to boil water but it does eventually!



	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC	GH-1380	\$17.95	\$15.95	\$14.35

### 12V 1L CAR KETTLE

This attractive kettle features a water level window, an auto-shut off and a boil dry protector. The kettle has a power rating of 150W, which is about the maximum you can pull from a cigarette lighter or 12V power socket. Make sure your cig lighter circuit has a 15A fuse fitted.

- Dimensions: 185(H) x 165(L) x 150(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	GH-1386	\$29.95	\$26.95	\$23.95

## Tech Talk: 12V Kettles, How Long Is Too Long?

A lot of people bring these back as they are dismayed at the amount of time it takes to boil water. They often take over 20 minutes to boil 1/2 a litre of water. You need to look at the physics of this. A 12V Kettle will often draw 20 amps at 12V. This equates to 240 watts of power. Whilst this may seem a lot, it is generally only a fraction of a domestic 240V Kettle. They routinely draw between 1800-2200 watts of power. No wonder they are quick! 12V Kettles work, but the laws of physics are against them. You may be able to live with them once you are aware of the above.



## ▼ FOOD & BEVERAGE ACCESSORIES (CONTINUED)

### 12V HEATED TRAVEL MUG - 450ML

Plugs into the cigarette lighter socket in the vehicle to keep your coffee, tea or soup hot as you travel. The double wall design is stainless steel so it won't rust, and the spill proof lid will help avoid any spills if you're travelling on a rough road.

- Supplied with a detachable 12V power lead to cigarette lighter plug
- 450ml



	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC	GH-1303	\$19.95	\$17.95	\$15.95

### 12V 35W HEATED LUNCHBOX WITH CUTLERY

Now you don't even have to find a microwave to keep your lunch hot. The 1.5L capacity provides space for a hearty lunch with a heated stainless steel inner, while the insulated outer casing keeps it cooler to the touch. Ideal for day-trips, road-trips, or even to help a tradie avoid the servo for lunch. It even includes cutlery, so you're ready for a hot lunch, wherever you're headed. Simply powered from the cigarette lighter.

- Food Capacity: 1.5L
- Power: 12V 35W
- Dimensions: 235(W) x 108(H) x 170(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC	YS-2840	\$34.95	\$30.95	\$27.95

### 12V LARGE PORTABLE STOVE

Perfect for cooking and/or storing food hot on those long trips. It gets up to 149°C and its insulated design keeps food hot, while the outside stays cool. It plugs into a 12V cigarette lighter socket in the car.

- Heats food in just 3 minutes
- Holds up to 3 litres
- Internal temperature up to 300°F/149°C
- Easy to setup and use
- Cable length: 1.9m

#### Dimensions:

- External: 270(L) x 200(H) x 170(W)mm
- Internal: 230(L) x 130(W) x 80(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC	YS-2811	\$49.95	\$44.90	\$39.90

### COLLAPSIBLE BUCKET & WASH MITT KIT

A handy collapsible bucket with a wash mitt for keeping your car clean at home or on the road. The mitt is like wearing a mop on your hand, it is extremely effective at clearing away dirt and grime from your car, truck, 4WD or motorbike. When the washing is finished just fold it all away and store in the supplied pouch. Keep one in the boot!

- Thumbless wash mitt for either hand
- Bucket capacity: 10.5L
- Dimensions: 245(Dia.) x 38 - 265mm high



	CAT.	Qty 1+
10.5L	GH-1266	\$3.95

## ▼ PORTABLE SHOWER

### 12V CAMPING SHOWER

All you need is a bucket of warm water and your vehicle's 12V battery and you can wash away the cares of the day. The 4.8 metre power cable plugs into your vehicle's cigarette lighter socket and a waterproof switch controls power to the pump. The shower comes with 2.1 metres of plastic tubing, pump, showerhead, hanging hook and a nifty carry bag to store it in. This self contained little beauty even has a water flow control valve built into the showerhead and will become an indispensable part of your travelling kit.



	CAT.	Qty 1+	Qty 3+	Qty 6+
12VDC	YS-2800	\$34.95	\$31.45	\$27.95

## ▼ THERMOELECTRIC COOLER & WARMERS

### 4L 12VDC PORTABLE COOLER / WARMER

With no compressor or refrigerant to worry about, this solid-state cooler / warmer is convenient and troublefree. Using a peltier device it can warm or cool with the flick of a switch. Keep your drinks cold at 12 - 15°C below ambient temperature, or keep a hot lunch warm at 60 - 63°C above ambient. It is powered via cigarette lighter lead in the car, and is a perfect companion to a campsite, worksite, a road-trip, or anywhere you want hot or cold food and drinks!



SPECIFICATIONS	GH-1384
Power	12VDC
Cooling Capacity	12°C - 15°C below ambient
Heating Capacity	60°C - 63°C above ambient
Power Usage	45 - 50W
Capacity	4L
Weight	2.1kg
Dimensions	190(W) x 270(H) x 250(D)mm (External), 142(W) x 210(H) x 140(D)mm (Internal)



	CAT.	Qty 1+	Qty 3+	Qty 6+
4L	GH-1384	\$59.95	\$53.95	\$47.95

### 7.5L 12VDC COOLER / WARMER

Use as a cooler to keep canned drinks, bottled drinks, sandwiches, fruit and salads fresh and cold without using ice or cold packs. No more digging around icy water for soggy foods and dripping drinks. Also ideal for storing temperature sensitive medicines when travelling.

Use as a warmer to keep pre-packaged/pre-heated meals, take out foods, soups and stews, leftovers, baby food jars and baby bottles safe and warm, ready to eat while on the road.

- Compact, lightweight unit ideal for travel
- Perfect for day trips, picnics, lunches or the beach
- Thermoelectric system cools or warms below or above the ambient temperature
- Insulated construction helps keep contents cool or warm, even after disconnecting from the power source
- Capacity 7.5 litres (equivalent to 11 cans of soft drink)
- Can fit 600mL bottles standing inside
- Suitable Power Supply 12VDC, 5A Cat GH-1379



SPECIFICATIONS	GH-1366
Voltage	12VDC
Current Draw	4A
Minimum Temperature	Approx 5°C
Maximum Temperature	Approx 60°C
Capacity	7.5L
Fused Plug	10A
Dimensions:	310(W) x 295(H) x 177(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
7.5L	GH-1366	\$89.95	\$80.95	\$71.95

### 14L 12VDC PORTABLE COOLER / WARMER

Here's a great way to keep your food and drink cool or warm in the car. It is extremely low noise and uses full foam insulation to keep it lightweight and portable. 12VDC powered, so it's simply a matter of connecting to your car's cigarette lighter socket and switch on either cooling or warming mode. Will fit a bottle of white wine or 2L bottle of milk lying down.

- CFC free



SPECIFICATIONS	GH-1373
Voltage	12VDC
Minimum Temperature	18°C - 20°C below ambient temp
Max Temperature	65°C
Capacity	14L
Power Usage Warming	38W
Power Usage Cooling	46W
Dimensions	490(L) x 305(W) x 270(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
14L	GH-1373	\$119.00	\$106.95	\$94.95
Replacement Lead	PP-1986	\$17.95	\$16.10	\$14.35



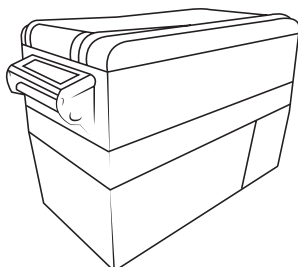
## PORTABLE REFRIGERATORS

### PORTABLE FRIDGE / FREEZER

Keeping your food and drinks cold anywhere is easy! With a powerful compressor and electronic control module, summer's heat is no match! Adjustable temperature setting from -20 to 10°C, with a clear control panel. Suitable for mains power, and also 12 & 24V systems, so it's great for trucks too. Automatic low-battery cutout prevents damage to your battery from over-discharge. A great unit that will give you years of faithful service.

#### Features:

- Digital temperature display with adjustable control
- AC or DC power connections
- Adjustable battery protection
- Dual mode operation (max & economy)
- Includes DC and AC power leads



SPECIFICATIONS	GH-1630 - 45L	GH-1632- 55L
Voltage	12V/24VDC & 240VAC	
Fuse	15A	
Rated Current for DC	3.8A @ 12VDC, 1.9A @ 24VDC	
Temperature Setting	-20 - 10°C	
Weight	13.5kg	15.8kg
Dimensions	690(D) x 332(W) x 455(H)mm	690(D) x 332(W) x 455(H)mm

	CAT.	Qty 1+
45L	GH-1630	\$499.00
55L	GH-1632	\$599.00

## Tech Talk: Thermoelectric Heating/Cooling

This technology uses the "Peltier Effect" to increase or decrease temperature. It is fully solid state and is very reliable. It is quite inexpensive as it does not use gas compressor technology. The amount of temperature differential from ambient, is however, fairly modest. If you really want massive chilling or freezing capacity, you are better of saving your pennies and buying a compressor-type unit like above.

## REPLACEMENT FRIDGE LEADS

### REPLACEMENT LEAD FOR PORTABLE FRIDGES

- Suits cigarette and merit sockets

#### SUITS WAECO FRIDGES

PP-1982

#### SUITS ENGEL FRIDGES

PP-1984



SUITS	LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
Waeco	1.8m	PP-1982	\$19.95	\$17.70	\$15.70
Engel	1.8m	PP-1984	\$19.95	\$17.70	\$15.70

### REPLACEMENT POWER LEAD FOR THERMOELECTRIC COOLER/WARMER

A replacement DC power lead to suit most common thermoelectric cooler/warmers which have the notched rectangular shape DC power input. Can fit into cigarette or merit sockets.



LENGTH	CAT.	Qty 1+	Qty 3+	Qty 6+
1.8m	PP-1986	\$17.95	\$16.10	\$14.35

## SWITCHMODE POWER SUPPLIES

### SWITCHMODE - MAINS TO CIGARETTE LIGHTER SOCKET 12V

For powering 12V equipment such as car coolers and camping fridges from a mains AC power source. Supplied with a 1.5m output lead with cigarette socket output, making connection simple and easy. Input voltage: 240VAC.

12VDC 7.5A Cat. MP-3575

Dimensions: 157(L) x 90(W) x 57(H)mm

12VDC 12.5A Cat. MP-3573

Dimensions: 200(L) x 100(W) x 65(H)mm



1 YEAR WARRANTY

CURRENT	CAT.	Qty 1+	Qty 5+	Qty 10
7.5A	MP-3575	\$44.95	\$40.45	\$35.95
12.5A	MP-3573	\$119.00	\$106.95	\$94.95

## PEST CONTROL

### THE AMAZING FLYGUN

The Amazing Flygun is a spring powered gun that kills flies, mosquitos and cockroaches! It is fun, safe and easy to use. The swatter is simply pushed onto the gun and it is ready to use. A long string is also attached so the swatter won't get lost. It is then ready to be reloaded and fired again. It is fun, effective and really does work! It has proven extremely popular, with thousands being sold every month!

SAFE FOR KIDS  
8 YEARS +



TRUST US! THIS THING REALLY WORKS!

	CAT.	Qty 1+	Qty 3+	Qty 6+
Flygun	YS-5545	\$7.95	\$6.95	\$6.25

### PERSONAL SONIC INSECT REPELLER

Keep the mozzies away! With a range of 6 metres, it's perfect for camping, picnics fishing etc. It also has a pocket or belt clip to keep it handy.

- Requires AA battery: SB-2424
- Dimensions: 95(L) x 20(Dia)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Insect Repeller	YS-5534	\$9.95	\$8.75	\$7.75

### HIGH POWER 'FREQUENCY SHIFTING' ULTRASONIC PEST REPELLER

This pest repeller uses frequency shifting techniques which may prevent pests from developing an immunity. The device has an output of 140dB that can protect up to 280 square metres.

The repeller may be effective against mice, rats, roaches, fleas, flies, crickets, silverfish, waterbugs, moths, ants, spiders & most other common pests.

The ultrasonic frequencies used are out of the hearing range of humans & most household pets such as cats, dogs, fish & birds etc. We make no guarantees that this will solve your particular problem, but there are thousands of people who swear by them.

- Supplied with mains plugpack and installation guide
- Dimensions: 120(Dia.) x 75(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
140dB	YS-5520	\$39.95	\$35.95	\$31.95

### DUAL SPEAKER PEST REPELLER

Emits ultrasonic sound waves which are extremely unpleasant for cock-roaches, flies, crickets, silverfish, mice & other nasty critters. Laboratory research has shown ultrasonic sound waves attack the auditory and nervous systems of most common pests causing them pain and discomfort. The high intensity sound waves will end up driving away these pests. The frequency can be adjusted from 22kHz up to 49kHz, for driving away certain pests. A clean alternative to poison or dangerous traps. Includes mains power supply.



SPECIFICATIONS	YS-5528
Frequency Range	22kHz-49kHz (manual control)
Power Consumption	2W
Output Sound Pressure	115dB x 2
Dimensions	155(L) x 90(W) x 85(D)mm

1 YEAR WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
2 x 115dB	YS-5528	\$59.95	\$53.95	\$47.95

## PEST CONTROL (CONTINUED)

### ELECTRIC FENCE ENERGISER - 10KM

Capable of electrifying up to 10km of fencing for enclosing livestock such as horses, chickens, cattle, sheep, etc. Installation is simple, connect up to a 12VDC lead acid battery via the alligator clips, and then using the binding posts, wire up to a suitably fitted electric fence wire and ground stake. You will need to ensure that you have the correct electric fence isolators, joiners wire and tape fitted to your fence to ensure it works properly - full instructions are included with the unit and available on our website. The required fencing components are available from most agricultural supply stores.

- 10km range
- 0.6 Joules
- Average power consumption: 10mA
- Max power: 12VDC 85mA
- 12VDC battery operated (recommended 4Ah or larger SLA)
- Minimum 3W solar panel recommended
- Dimensions: 171(H) x 95(W) x 45(D)mm

**DO NOT CONNECT TO MAINS ELECTRICITY.**



	CAT.	Qty 1+	Qty 3+	Qty 6+
Fence Energiser	ME-6800	\$84.95	\$76.45	\$67.95

### MOSQUITO ZAPPER WITH 180 LUMEN LED LANTERN

This rechargeable electronic zapper measures 90mm in diameter and 130mm high. It weighs only 200 grams and features a nifty double hook to mount anywhere. The unit also features a soft white light (3 light levels) which can be operated independently of the zapper. The zapper can work with or without the light. When on, the zapper has an unobtrusive UV style light, which attracts the bugs. The bugs fly through the finger guard only to be confronted with a high voltage grid which either kills them instantly or stuns them. Result? No more bugs around your ears at 2am! It gets better. The unit is charged by USB! It works for about 8 hours on a charge, depending on insect kill rate and lighting level. Great for camping or at home.

SPECIFICATIONS	YS-5544
Lumens	Low: 30 Medium: 90 High: 180
Battery Life	Low Light: Up to 4 hours Medium Light: Up to 8 hours High Light: Up to 20 hours
UV	Up to 30 hours
UV LED	5W
Battery	3.7V, 2000mAh Li-Po
Input Power	5V @ 1A
Charge Time	3-4 hours
Dimensions	130(H) x 90(Dia.)mm
Weight	204g



	CAT.	Qty 1+	Qty 3+	Qty 6+
	YS-5544	\$29.95	\$26.95	\$23.95

## GAS MONITORING

### ELECTRONIC LPG GAS LEVEL MONITOR

The clever unit attaches to your steel LPG bottle. It detects the gas in your bottle, (typically 9kg) and gives a musical alarm when the gas in your bottle is low. Don't run out of gas halfway thru a barbie ever again! Works on any steel LPG cylinder, virtually no installation.

- Uses 2 x AA batteries (supplied)
- Magnetically attaches to cylinder



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QM-1662	\$13.95	\$12.55	\$11.15

### GAS LEAKAGE DETECTOR

Gas leaks can be incredibly dangerous, even small ones. Run a quick check over your house or gas powered devices to make sure all outlets are safely sealed. Hold the power button for a few seconds and then place the detector near the suspected leak and visual/audible warnings will sound if the leak is bad, moderate or safe. Red (Hi), orange (Lo), and green (safe) LEDs denote the severity of the leak.



SPECIFICATIONS	QP-2299
Requires	2 x AAA batteries (not included)
Sensor Detects	butane, propane, acetylene, and methane (natural gas)
Dimensions	165(L) x 27(W) x 21(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QP-2299	\$44.95	\$40.45	\$35.95

## EMERGENCY & FIRST AID

### SURVIVAL KNIFE WITH LED TORCH/FIRE STARTER/BELT CUTTER/WINDOW BREAKER

Built for extreme adventures, the knife is crafted using Grade 420 stainless steel for maximum durability. Use the serrated edge to cut with speed or the straight edge to cut with precision. The built-in LED light lets you see in the dark while the magnesium alloy fire starter lets you start your own campfire. If you find yourself trapped inside your own vehicle, use the belt cutter & window breaker for an escape.

- Grade 420 stainless steel construction with anodised aluminium handles
- Liner lock system
- Blade features straight and serrated edges
- Built-in LED light
- Magnesium alloy fire starter
- Belt cutter
- Window breaker
- Dimensions: Open: 208(L)mm Closed: 126(L)mm

Some age restrictions apply in some states for knife sales.



	CAT.	Qty 1+	Qty 3+	Qty 6+
Survival Knife	TH-1925	\$18.95	\$17.05	\$15.15

### 1KG FIRE EXTINGUISHER - CLASS 1A:10B:E

An essential product to have in any vehicle or vessel. 1kg dry powder extinguisher suitable for grease, oil, petrol and electrical fires. Supplied with pressure gauge and mounting bracket.

- Fire rated 1A:10B:E
- AS1841.5 compliant
- Non toxic



SEE OUR TECH TALK ON POWDER FIRE EXTINGUISHERS BASICS. IT'S A MUST READ.  
[www.jaycar.com.au/buyingguides](http://www.jaycar.com.au/buyingguides)

	CAT.	Qty 1+	Qty 6+
1kg - Class 1A:10B:E	GG-2344	\$29.95	\$26.95

### FIRE BLANKET

Designed for extinguishing small fires. The fire retardant fibreglass fabric will suffocate the flame quickly allowing you to restore safety. Keep one in your kitchen, workshop, boat, caravan, 4WD or at the campsite.

- Supplied in soft pouch



	CAT.	Qty 1+	Qty 3+	Qty 6+
1m x 1m	GG-2340	\$14.95	\$13.45	\$11.95
1.2m x 1.8m	GG-2342	\$24.95	\$22.35	\$19.70

### 47 PIECE FIRST AID KIT

Ideal for the home, office, car or boat. This kit contains sticky plasters, bandages, safety pins, antibacterial solution, scissors and much more. All packed in a super durable, red high visibility nylon storage case.



	CAT.	Qty 1+	Qty 3+	Qty 6+
First Aid Kit	ST-3968	\$16.95	\$15.25	\$13.55





## AIR COMPRESSORS

### 12VDC AIR COMPRESSORS

Powerful air compressors great for a variety of outdoor activities and emergency situations such as pumping flat car/4x4/truck tyres, inflatable boats, air beds, etc. Both models incorporate automatic thermal cut-out for added protection as well as cleanable air filters to keep the units free from dirt and other contaminants. Includes heavy duty battery clamps for secure connection to your 12V power source and extendable coil hoses for reaching those tricky spots. Each unit has anti-vibration mounting feet to ensure they stay planted to the ground and a foam grip handle. Accessory nozzles for pumping bike tyres, balls, and other inflatables included as well as a black carry bag.



WARRANTY



MC-7200

SPECIFICATIONS	MC-7202	MC-7200
Power	12VDC	
Gauge	150PSI	
Current	35A	45A
Max Pressure	150PSI	
Power	420W	540W
Max Air Flow	72L per minute	180L per minute
Hose	10m PA Hose	5m PA Hose
Dimensions	289(L) x 185(H) x 139(W)mm	345(L) x 215(H) x 150(W)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
72L/min	MC-7202	\$129.00	\$115.95	\$102.95
180L/min	MC-7200	\$199.00	\$178.95	\$158.95

## Tech Talk: Air Compressors

How do you know you are getting a good compressor? The real way is to pull the compressor apart and check the piston. A good compressor will have a steel piston in an alloy cylinder, or an alloy piston in a steel lined cylinder. An easier way is to look at the construction of the tyre inflator. Cheap compressors supply a poorly built & flimsy unit. Check ours out.

## OIL PUMP

### OIL PUMP 0.3-1.2LPM 12VDC 5A WITH 1.2M HOSE

Perfect for siphoning oil to a holding tank, or refilling oil on your inboard while reducing the potential of a bilge full of oil from a spill. Suitable for motor oil and diesel, but not petrol or other highly flammable liquids. Includes 5m hose.

*Note: Motor oil should be warm where possible (40-60°C) for maximum transfer speed. Not suitable for pumping of water or high viscosity oils (such as gearbox oil).*

#### Features:

- Fast transfer
- Quick battery connection
- Up to 1.2 litres per minute



SPECIFICATIONS	MC-7250
Power	12VDC @ 5A, 60W
Maximum Duty Cycle	30 minutes
Maximum Flow Rate	Diesel or Heated-Oil: Approx. 250 l/h Motor-Oil (40°-60°C): Approx. 3 l/min
Weight	785g
Dimensions	140(W) x 128(D) x 85(H)mm
Cable Length	1m coiled cable

	CAT.	Qty 1+	Qty 3+	Qty 6+
	MC-7250	\$49.95	\$44.95	\$39.95

## METAL DETECTORS

### 4 IN 1 METAL DETECTOR EXPLORER'S KIT

A metal detector only does half the job, once the needle starts to flick and the alarm starts to beep, you know you are in for some serious digging. This handy digging set is very light to be carried around and also very tough and durable.

- Includes headphones to connect to your metal detector, a 2-in-1 handheld shovel/rake, a sieve and a carry bag

*Note: Metal detector not included.*



	CAT.	Qty 1+	Qty 3+	Qty 6+
Explorer's Kit	QP-2304	\$49.95	\$44.90	\$39.90

### WATERPROOF METAL DETECTION PIN-POINTER WITH VIBRATING ALERT

Don't waste time ploughing around a large area to find the target object, pin-point exactly where your desired metal is before digging. Highly accurate and capable of detecting a coin at up to 30mm depth, it will alert you when you've found your treasure with LED indication and vibration. Easy to carry and waterproof, it is ideal for use in many environments.

- Completely waterproof
- LED indicator and vibrating alert
- Low battery indication
- Power: Requires 1 x 9V alkaline battery



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
Pin-Pointer	QP-2305	\$59.95	\$53.95	\$47.95

### BEGINNER METAL DETECTOR WITH AUTO TUNE

A great beginner's metal detector! It is very simple and easy to use - it has an auto tune feature with a meter indication to show metal types detected. It is very reliable with its microprocessor control and digital signal processing. The detector has an adjustable length boom and a waterproof search coil making it suitable for use in a variety of landscapes. It is capable of detecting a coin at 100mm deep and responding to all types of metals. It features volume and sensitivity adjustment knobs, audible alert speaker and headphone socket.

- Requires 6 x AA batteries
- Overall length: 780mm
- Search coil dimensions: 165(Dia.) x 17(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
	QP-2302	\$89.95	\$80.95	\$71.95

### WATERPROOF METAL DETECTOR WITH LARGE LCD

Ideal for beachcombing and prospecting as well as finding objects in obscured locations such as long grass, this high grade portable metal detector is suitable for many applications. Capable of detecting a coin at up to 180mm depth it will detect a variety of metals, with three different tones to distinguish dissimilar metals. Operating at a low frequency of 6.6kHz, the detector will only respond to metal objects and ignores the effects of iron ground mineralization, making it more accurate for locating at large depths. Alternatively, the all-metal mode can be switched on to enable any underground metal traces detected and is signalled both optically and acoustically. An extra large waterproof pick-up coil with its intricate two-dimensional helical winding technology enables very fine and precise measurements to be carried out while carrying it comfortably with the arm support.

- Adjustable sensitivity
- Deep target searching
- 3 Operation modes: All metal, Disc, Notch
- Ferrous/Non-ferrous indicators
- Waterproof search coil
- 3 Tones for different metal indication
- One touch auto ground balance
- Headphone jack & 2" speaker
- DSC and GND adjustment
- Requires 2 x 9V batteries
- Overall length: 1250mm
- Search coil dimensions: 205(Dia.)mm



WARRANTY

	CAT.	Qty 1+	Qty 3+	Qty 6+
	QP-2307	\$169.00	\$151.95	\$134.95

## Action Cameras:

Many of the low production budget car shows on FOXTEL® have video shots from the dashboard of the car looking back to the driver's or shots from the outside of the car. These shots are performed by so-called "action" cameras attached to the bodywork. They work and they work well, and expand the viewing experience. Many people, however, pay big money for brand-name action cameras making the mistake that they have to pay the big bucks to get the best result. Action cameras have been around for over 10 years now and the first brand-name ones really were superior. Secondary manufacturers (indeed the actual manufacturers of

the brandname units in many cases) now produce products that are as good as the brand models but are sometimes half the price of the prestige units. The engineers at Jaycar are not fooled by fancy brand names. We just look for similar specifications to the big brands and of course, case integrity and allround quality. If you are a reader of this catalogue you are technically elite enough to see through the marketing hype of brand names. Check out our range. Oh, and note the warranties. Our gear is good and you will save money!

### 1080P ACTION CAMERA WITH LCD

Go anywhere, video everything! This is the sort of camera you can just give to the kids and let them run. At such a low cost, it's not quite so tragic if it's lost or damaged during some backyard antics. It records full HD 1080p video, and can even go swimming with them thanks to the 30m waterproof case. It will also take 8 megapixel photos. Compatible with our huge range of accessories to mount to a bike, skateboard, surfboard, or even the dog.



SPECIFICATIONS	QC-8075
<b>Video Resolution</b>	1080p @ 30fps 720p @ 60fps
<b>Photo Resolution</b>	8 megapixel
<b>Battery Life</b>	Up to 1.5hrs
<b>Memory Card</b>	microSD up to 32GB (Class 10 - not included)
<b>Dimensions (With Case)</b>	77(W) x 43(D) x 65(H)mm
<b>Dimensions (Without Case)</b>	59(W) x 31(D) x 41(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Action Camera	QC-8075	\$99.95	\$89.95	\$79.95
Spare Battery 3.7V 900mAh	QC-8081	\$11.95	\$10.75	\$9.55

### 1080P WI-FI ACTION CAMERA WITH LCD

This is a go-anywhere camera with enough capacity to film in slow-motion if you want it to (60fps). Ideal for capturing fine detail in sports or even adding a new dimension to backflips by the pool. When you download the Movii app, you can control and stream from the camera to your smartphone, so you see precisely what's happening wherever it's mounted. Its 30m rated waterproof enclosure means it's suitable for diving and watersports. The huge range of mounts and accessories mean you can use it however you like, and be confident you'll get the shot. Full HD video at up to 60fps (high speed), with full smartphone control - what a great idea.

- Full features and specifications: [movii.com.au/neostream](http://movii.com.au/neostream)
- Search the App Store or Google Play for the Movii app to control this device!



SPECIFICATIONS	QC-8077
<b>Video Resolution</b>	3840 x 2160 @ 30fps (interpolated) 1920 x 1080 @ 60fps / 30fps
<b>Photo Resolution</b>	8 megapixel
<b>Battery Life</b>	Up to 1.5hrs
<b>Memory Card</b>	microSD up to 64GB (Class 10 - not supplied)
<b>Dimensions (With Case)</b>	77(W) x 43(D) x 65(H)mm
<b>Dimensions (Without Case)</b>	59(W) x 31(D) x 41(H)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
Action Camera	QC-8077	\$169.00	\$151.95	\$134.95
Spare Battery 3.7V 900mAh	QC-8081	\$11.95	\$10.75	\$9.55

## Action Camera Accessories:



QC-8059



QC-8060



QC-8054



QC-8050



QC-8090



QC-8078



QC-8086

	CAT.	Qty 1+	Qty 4+	Qty 10+
Carry Case for Action Cameras	QC-8059	\$19.95	\$17.95	\$15.95
Anti Fog Sachets	QC-8076	\$3.95	\$3.55	\$3.15
Chest Mount	QC-8060	\$24.95	\$22.50	\$19.95
Helmet Mount	QC-8058	\$14.95	\$13.45	\$11.95
Bike Mount 17-32mm	QC-8054	\$16.95	\$14.95	\$13.35
Sports Cam Pole Mount 32-55mm	QC-8056	\$18.95	\$16.95	\$14.95
Wrist Strap Adaptor	QC-8080	\$19.95	\$17.95	\$15.95
Triple Suction Cup Mount	QC-8088	\$24.95	\$22.45	
Surfboard Mount	QC-8050	\$29.95	\$26.95	\$23.70

	CAT.	Qty 1+	Qty 4+	Qty 10+
Head Strap	QC-8062	\$16.95	\$15.25	\$13.55
Dog Mount Harness	QC-8090	\$39.95	\$35.95	\$31.95
Monopole Mount with Adaptor	QC-8066	\$29.95	\$26.95	\$23.70
Floating Extendable Monopod	QC-8096	\$49.95	\$44.95	\$39.95
Zip-Type Wrist Gymbal Adaptor	QC-8082	\$24.95	\$22.45	\$19.95
Flexible Clamp Mount	QC-8078	\$29.95	\$26.95	\$23.95
Universal Mini Tripod Kit	QC-8099	\$14.95	\$13.45	\$11.95
360° Rotation Clip Mount	QC-8086	\$12.95	\$11.65	\$10.35
3 Way Tripod Stand	QC-8098	\$29.95	\$26.95	\$23.95



## Select Your Model: Weather Stations



	XC-0366	XC-0400	XC-0346	XC-0348	XC-0370	XC-0422
Touch Screen				•	•	
Indoor Thermometer	•	•	•	•	•	•
Outdoor Thermometer	•	•	•	•	•	•
Min/Max Records	•	•	•	•	•	•
Hygrometer	•		•	•	•	
Wind Speed		•	•	•	•	•
Wind Direction		•		•	•	•
Wind Chill		•	•	•	•	•
Dew Point		•	•	•	•	•
Rain Gauge		•	•	•	•	•
Rain Rate		•	•	•	•	•
Barometric Pressure	•	•		•	•	•
Moon Phase	•					
UV Index					•	•
Solar Radiation					•	•
Time/Date Display	•	•	•	•	•	•
High/Low Alarms	•	•	•	•	•	•
Transmitter Power	2 x AAA	2 x AA	Solar Power	Solar Power	Solar Power	Solar Power
Upload to PC				•		•
Built-in Memory	•	•	•	•	•	•
Expandable Memory						
Transmission Range	30m	100m	50m	50m	100m	100m
Page	510	510	511	511	512	512

## WIRELESS WEATHER STATIONS

### COMPACT WIRELESS WEATHER STATION/CLOCK CALENDAR

This stylish unit features moon phases for the Australian/NZ region. It does not have wind speed/direction but has everything else. It has an external temperature/humidity, barometric sensor, (which really should be on an outside window sill so that you can easily access it for battery change).

It has fantastic time logging:

- Clock, clock alarm/snooze
- Calendar, including Day announcement
- Barometer trend log
- Weather forecast icons: Sunny, Partly Cloudy, Cloudy, Rainy, etc
- Moon phase display (with tide indication)
- Sunrise/sunset time display
- Temperature/humidity display
- Temperature alert alarm

All-in-all excellent value for money.



<b>SPECIFICATIONS</b>	<b>XC-0366</b>
Transmitter Frequency	433MHz
Power	2 x AA & 2 x AAA (not included)
Dimensions	Console: 220(W) x 141(H) x 36(D)mm Transmitter: 100(W) x 55(H) x 22(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Compact Wireless Weather Station	XC-0366	\$64.95	\$58.45	\$51.95

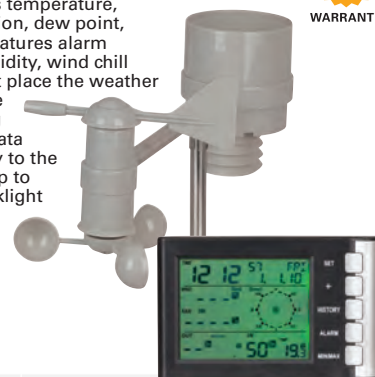
## Can You Trust The BOM (Bureau Of Meteorology)?

They're not bad, but their weather forecast can end at the adjoining suburb! Find out what's happening in your backyard in real time with your own weather station!

### WIRELESS WEATHER STATION WITH 5.5" MINI LCD

Keep a weather station in the house to get a quick and accurate view of various weather parameters. This unit records temperature, wind chill, wind speed/direction, dew point, humidity and more. It also features alarm modes for temperature, humidity, wind chill and more. Easy to setup, just place the weather sensors outside and keep the LCD inside as a free standing unit or mounted on a wall. Data will be transmitted wirelessly to the display unit over distances up to 100m. It features an LED backlight for greater reading clarity in poor light.

- Records min/max temperature
- Wind direction
- 12 or 24 hour time display
- Time alarm



<b>SPECIFICATIONS</b>	<b>XC-0400</b>
Temperature Range (Outdoor)	-40°C to 65°C (-40°F to 149°F)
Temperature Range (Indoor)	-9.9°C to 60°C (-14°F to 140°F)
Windchill	-40°C to 65°C (-40°F to 149°F)
Weather Alarm Mode	Temp, humidity, wind chill, dew point, rainfall, wind speed
Wind Speed	km/h, mph, m/s, knots, Beaufort
Power	Outdoor Sensor: Requires 2 x AA 1.5V LR6 Alkaline batteries. Base Station: 3 x AA 1.5V LR6 Alkaline batteries Power supply included for base station.
Dimensions (Base Station)	172(H) x 119(L) x 31(W)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Wireless with 5.5" Display	XC-0400	\$99.95	\$89.95	\$79.95



## WIRELESS WEATHER STATIONS (CONTINUED)

### WIRELESS WEATHER STATION WITH SOLAR POWERED SENSORS

A feature-packed weather station for the enthusiast forecaster. The outdoor sensors are powered by a solar panel and will monitor up to 10 key weather parameters. The data is transmitted up to 50 metres to the indoor base station to keep you updated on current and future weather conditions. Solar powered means you'll never have to think about battery replacement.

The station will measure indoor/outdoor temperature, relative humidity, rain, wind speed, wind chill, dew point, barometric pressure and also displays the date and time. All minimum and maximum values with the date and time it was recorded will be stored for your reference on an easy to read display screen.

The unit includes a weather tendency indicator that will display 1 of 4 icons (sunny, cloudy, partly cloudy or rainy) indicating the likelihood of future weather. When the sensors detect a pressure fall of 3 - 9hPa, a storm warning will be displayed on-screen. The storm threshold value is user adjustable. Alarms for certain weather conditions can be programmed to alert you to potential atmospheric hazards. If you enjoy outdoor activities that require specific weather conditions the alarm feature is a great tool to give you accurate information on potential trouble.

Base station requires 3 x AA batteries.

- Solar powered sensor
- Indoor and outdoor temperature display in Celsius or Fahrenheit
- Wind speed display in kmh, mph, knots or Beaufort scale
- Wind chill
- Rainfall data ranging from 1 hour up to 1 month or total since last reset
- Records all minimum and maximum values with time and date of their recordings
- Dew point display Celsius or Fahrenheit
- Weather forecast (sunny, cloudy, partly cloudy, rainy)
- Storm warning alarm
- Weather alarm modes for temperature, humidity, wind chill, dew point, rainfall, wind speed, air pressure, storm warning
- Perpetual calendar

#### SPARE PART - SOLD SEPARATELY

2 x Spare rechargeable alkaline batteries CAT. XC-0343



SPECIFICATIONS	XC-0346
Indoor Temperature Range	0°C to 50°C +/- 10%
Outdoor Temperature Range	-40°C to 65°C +/- 10%
Humidity Range	1% - 99%
Hygrometer Range	1%RH- 99%RH
Wind Chill	Yes
Wind Speed	Yes
Rain Gauge	0 - 9999mm
Dew Point	Yes
Wind Direction	No
Weather History Record	Yes
Barometric Pressure	Yes
Frequency	433MHz
Wireless Transmission Range	50m
Display Unit Dimensions	150(L) x 30(W) x 160(H)mm
Height Of Outdoor Mast	570mm (with sensors: 630mm)

### TOUCH SCREEN USB WIRELESS WEATHER STATION WITH SOLAR POWERED SENSORS

A highly advanced weather station with an unbeatable range of features to keep you fully updated on current and future atmospheric activity. The outdoor sensors are simple to install and will wirelessly transmit data to the base station which interprets and displays the data on the touch screen panel. You can also connect the base station to your PC through USB and upload all recorded weather data for more in-depth analysis. Now supplied with a solar panel with rechargeable batteries, it can be installed remotely and never worry about battery replacement.

The sensors will read indoor/outdoor temperature, wind speed, wind chill, wind direction, dew point, humidity, rainfall and barometric pressure and is solar powered so you don't have to think about batteries.

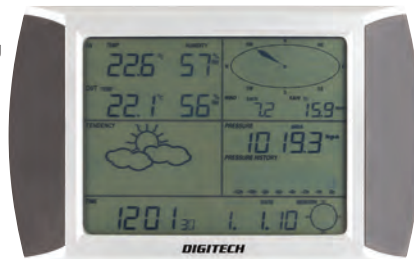
The weather tendency indicator will inform you of changing conditions based on fluctuating barometric pressure and there are programmable alarm modes for all of the recordable weather conditions so you will know if a storm is coming or if winds are too gusty for your Sunday picnic. All minimum and maximum weather values are recorded with the time and date of recording and are stored on the base station for your reference.

Display unit requires 3 x AA batteries.

- Solar powered sensors
- Touch screen LCD panel
- Wind speed / Wind direction / Wind chill
- Dew Point
- Weather forecast tendency arrow
- Weather alarm modes for: temperature, humidity, wind chill, dew point, rainfall, wind speed, air pressure, storm
- Time display hours, mins, date
- 100 year calendar display
- Weather symbols and barometer tendency display
- Perpetual calendar
- LED backlight

#### SPARE PART - SOLD SEPARATELY

2 x Spare rechargeable alkaline batteries CAT. XC-0343



SPECIFICATIONS	XC-0348
Indoor Temperature Range	0°C to 50°C +/- 1.0°C
Outdoor Temperature Range	-40°C to 65°C +/- 1.0°C
Humidity Range	10% - 99%
Hygrometer Range	1%RH- 99%RH
Rain Gauge	0 - 9999mm
Weather History Record	Yes
Barometric Pressure	Yes
Frequency	433MHz
Wireless Transmission Range	50m
Display Unit Dimensions	230(L) x 145(W) x 35(H)mm
Height Of Outdoor Mast	570mm/with sensors: 630mm



## WIRELESS WEATHER STATIONS (CONTINUED)

### 7" TOUCH SCREEN USB WIRELESS WEATHER STATION WITH SOLAR POWERED SENSORS

A highly advanced weather station with an unbeatable range of features to keep you fully updated on current and future atmospheric activity. The outdoor sensors are simple to install and will wirelessly transmit data to the base station which interprets and displays the data on the touch screen panel.

You can also connect the base station to your PC through USB and upload all recorded weather data for more in-depth analysis. Now supplied with a solar panel with rechargeable batteries, it can be installed remotely and never worry about battery replacement.

The sensors will read indoor/outdoor temperature, wind speed, wind chill, wind direction, dew point, humidity, rainfall and barometric pressure and is solar powered so you don't have to think about batteries.

The weather tendency indicator will inform you of changing conditions based on fluctuating barometric pressure and there are programmable alarm modes for all of the recordable weather conditions so you will know if a storm is coming or if winds are too gusty for your Sunday picnic. All minimum and maximum weather values are recorded with the time and date of recording and are stored on the base station for your reference.

Display unit requires 3 x AA batteries.

- Solar powered sensors
- Touch screen LCD panel
- Wind speed / Wind direction / Wind chill
- Dew Point
- Weather forecast tendency arrow
- Weather alarm modes for: temperature, humidity, wind chill, dew point, rainfall, wind speed, air pressure, storm
- Time display hours, mins, date
- 100 year calendar display
- Weather symbols and barometer tendency display
- Perpetual calendar
- LED backlight

#### SPARE PART - SOLD SEPARATELY

2 x Spare rechargeable alkaline batteries Cat. XC-0343



WARRANTY

SPECIFICATIONS	XC-0370
Indoor Temperature Range	0°C to 50°C +/- 1.0°C
Outdoor Temperature Range	-40°C to 65°C +/- 1.0°C
Humidity Range	10% - 99%
Hygrometer Range	1%RH- 99%RH
Rain Gauge	0 - 9999mm
Weather History Record	Yes
Barometric Pressure	Yes
Frequency	433MHz
Wireless Transmission Range	50m
Display Unit Dimensions	230(L) x 145(W) x 35(H)mm
Height Of Outdoor Mast	570mm/with sensors: 630mm

### WI-FI WIRELESS STATION WITH 7" LCD DISPLAY

A professional grade weather station complete with Wi-Fi access. This system is very similar to our XC-0370 but with the important ability to upload directly to Weather Underground, the most popular crowd-source powered website for enthusiasts in the world. Once this weather station is registered with Wunderground, you will be able to monitor its readings from anywhere using the freely available mobile apps. You will also receive a personalised 14-day Front Door Forecast for the precise location where you place this weather station, and even get alerts via SMS or email.

The website also archives all historical data and gives you the access to read them in graphs and charts. With over 100,000 registered devices world wide, this is by far the largest personal weather station network and is rapidly becoming an industry standard. Apart from the Wi-Fi feature, this weather station will measure almost anything planet earth can throw at it, as you would expect from a system of this calibre. It's capable of displaying temperature, wind speed, wind direction, wind chill, barometric pressure, and dew point. You can see how much rain has fallen in 1 hour, a day, a week, or a month, see the current UV index reading, and even see the current lux measurement outdoors which is great for those who have rooftop solar arrays. Install the sensors outside and the readings will be transmitted wirelessly to the base unit up to 150m away.

Minimum and maximum weather values are all recorded along with the corresponding date and time of occurrence. It also features a high/low alarm which will display a visual and give an audible warning when a measurement exceeds or drops below the current record. The threshold for these alarms can be manually configured. The main base is fully solar powered so you need not worry about mains power or constantly adding new batteries. There is a separate indoor sensor that has inbuilt display for temperature, humidity, and barometric pressure.

The interface is beautifully designed and features attractive weather symbols to indicate atmospheric status, everything is clear and easy to read, settings are easily accessible with the buttons on the front of the screen where you can navigate to history, graphs, and setup. The display backlight can be manually turned on/off via the front panel, or automatically at set times so for example it will switch off 8.30pm at night. You can also calibrate values if you happen to notice certain readings are off.

- Wi-Fi Access
- Upload weather data to wunderground.com automatically
- Alarm clock
- Display night switch
- Includes 38MB built-in memory
- Records of all minimum & maximum values with time/date of recordings
- Recording interval: 1 to 240 mins (tabulated and graphic with zoom)
- Up to 100m line of sight wireless transmission range
- Uses microSD Card memory (not included) for backup (can accept any capacity microSD card)

CAT.	Qty 1+	Qty 3+	Qty 6+
XC-0422	\$499.00	\$449.00	\$399.00



SPECIFICATIONS	XC-0422
Outdoor/Indoor Temperature	-40°C to 60°C / -40°F to 140°F
Outdoor/Indoor Humidity	1% - 99%
Wind Speed	0-50m/s / 0-100mph -(km/h, knot, mph, bft, ft/s, m/s)
Wind Gust	km/h, knot, mph, bft, ft/s, m/s
Wind Direction	Degrees, cardinal directions
Wind Chill	Yes C° / F°
Dew Point	Yes C° / F°
Rain Gauge	0-9999mm, inch (Daily, weekly, monthly, yearly)
Rain Rate	mm/hr, in/hr
Weather Forecast Symbols	Sunny, partly cloudy, cloudy, rainy, storm
Barometric Pressure	300-1100hPa / 8.85-32.5inHg) hpa, in Hg, mm Hg (Absolute, Relative)
Uv Index	uW/cm2
Solar Radiation (Lux) Meter	0-400k Lux (W/mm2, lux, fc)
Time And Date Display	(HH:MM:SS)
Mounting Hardware	Pole, U bolts, clamps, nuts
Level Indicator	Bubble
Display Unit Dimensions	195(W) x 138(H) x 20(D)mm



WARRANTY

## ENVIRONMENT MONITORS

### HAND-HELD ANEMOMETER WITH TRIPOD STAND

Measure wind speed in km/h, mph, ft/min, meters/sec or knots for your outdoor activity. It also indicates wind-chill, air temperature, comfort level & displays current, max & average wind speed. There is also a beaufort scale bar graph for a quick indication on the wind condition. Supplied with lanyard & tripod.

- Windspeed range: 0.3m/s to 30m/s
- LED backlit display
- Celsius and Fahrenheit selectable
- Temperature range: -29.9°C to +59°C
- Temperature resolution: 0.1°C
- Comfort levels: Comfort, Cool, Cold, Extreme & Danger
- 3V button cell battery (CR2032) included
- Low battery detection and display
- Battery life: Approx 12 months
- Dimensions: 140(H) x 50(W) x 18(D)mm less stand



	CAT.	Qty 1+	Qty 3+	Qty 6+
Anemometer	QM-1644	\$69.95	\$62.95	\$55.95

### WIND SPEED ANEMOMETER/THERMOMETER

This unit is a more sophisticated version of our QM-1644 Anemometer. Firstly, it is capable of measuring wind/airflow parameters at the same time as monitoring temperature.

- Metres/sec; km/hr; feet/min; miles-per-hour; knots
- Cubic metres/minute; cubic feet/minute
- Air temp, 0°C-50°C (0.1°C resolution)
- Auto power off
- Vane impeller ball bearing mounted
- 1m vane probe lead



	CAT.	Qty 1+	Qty 3+	Qty 6+
Anemometer	QM-1646	\$129.00	\$115.95	\$102.95

### DIGITAL RAIN GAUGE WITH TEMPERATURE

This Digital Rain Gauge with Temperature has a wireless self-emptying rain collector for measuring rain fall and temperature. The wireless rain collector sensor transmits data by using a low power radio frequency to the display main unit that can be located up to 150m away (line of sight). The display unit stores the data over a time range to allow you to monitor and analyse the weather status for past 24 hours. It has advance features such as the HI/LO Alert alarm to alert you while the set high or low weather criteria are met. It allows you to analyse hourly, daily, weekly, monthly and yearly rain fall records. With radio-controlled / atomic clock feature built-in, the system is truly a remarkable personal but professional rain gauge for your own backyard.

- Large backlit LCD display unit
- Total Hourly, Daily, Weekly, Monthly and Yearly rainfall display
- Data logger stores and gathered data to display rainfall
- Graphical histogram display shows variation of rainfall pattern
- SINCE function to display TOTAL rainfall from a date
- Measures temperature
- Real time clock display with Atomic Radio Controlled function
- 150m sensor transmission range
- High / Low Alert function
- Alarm function with ice-alert function



SPECIFICATIONS		XC-0430			
Battery		2 x AA size 1.5V batteries (not included)			
Support Channels		Wireless sensor (Rain gauge, thermo sensor)			
Dimensions		155(H) x 95(W) x 23(D)mm			
Weight		212g			
	CAT.	Qty 1+	Qty 3+	Qty 6+	
Rain Gauge	XC-0430	\$89.95	\$80.95	\$71.95	

### USB TEMPERATURE & HUMIDITY DATA LOGGER

An easy to use temperature and humidity data logger with USB interface. The logger is water resistant so it can be used indoors or outdoors. Big buttons with LCD display to easily change your settings. Stores up to 20,736 readings, and there is capacity gauge to monitor memory usage. Once connected to a computer via USB, the supplied software can read the logged data and export in graphs or CSV files.

- 20,736 readings capacity
- Logging interval from 8 seconds to 4 hours



SPECIFICATIONS		XC-0424			
Temperature Range		-40°C to 60°C			
Humidity Range		0%RH - 99%RH			
Power		1 x 3V CR2032			
Battery Life		12 months			
Dimensions		87(L) x 60(W) x 19(H)mm			
	CAT.	Qty 1+	Qty 3+	Qty 6+	
	XC-0424	\$49.95	\$44.90	\$39.90	

### ULTRASONIC WATER TANK LEVEL METER WITH THERMO SENSOR

Keep an eye on your outdoor water tank from the comfort of your own living room, up to 100m away. Installed at the top of your water tank, the transmitter unit measures the water level and temperature using an ultrasonic sensor. You can hang the receiver unit on a wall (hooks) or pull out the stand and place it on your kitchen bench top, table or desk. View your room's temperature, tank temperature and water level (represented by a 10 element bar graph). You can store min/max records and set alarms for specific water levels (high/low) or when empty.

- Transmission range up to 100m
- Time display (12/24hr) / Time alarm mode
- Calendar display
- Indoor temp. display / Tank temp display
- Tank level display (metre/feet)
- Water level displayed on a 10 element bar graph
- Min. & Max. records for indoor & tank temp
- Tank level alarm mode (high/low)
- Tank empty alert
- Low battery indicator
- Tank level updated every 30 seconds or 3 mins
- Wall mount, Free standing
- Battery power: receiver 2 x AA 1.5V (not included), outdoor transmitter: 6 x AAA 1.5V (not included)
- Dimensions: Receiver: 106(L) x 97(W) x 24(D)mm  
Sensor (into tank): approx 47(Dia.)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Water Tank Level Meter	XC-0331	\$79.95	\$71.95	\$63.95



### Smart Hardware Competition: - PAUL SAVAGE, SHOPS AT JAYCAR ELIZABETH

"Misting Fan Console / Controller 12 volt 3 different modes including Motion detection, Timer and Full power. Infrared control by remote or mobile phone app, runs a 3 Amp 100psi high pressure pump with a misting nozzle. LED Cooling fans x2 with Voltage gauge 7.5amp wiring with a 5 Amp fuse. Version 7.0 I spent lots of time perfecting this setup."





## DESKTOP THERMOMETER & CLOCKS

### INDOOR DESK THERMOMETER

Handy desk or table-top thermometer. Measures degrees Celsius with hi and low memory. Tilting bail for standing on desk purposes.

- Battery included



SPECIFICATIONS	QM-7316			
Range	-20°C to 50°C			
Dimensions	64(W) x 72(H) x 18(D)mm			
	CAT.	Qty 1+	Qty 3+	Qty 6+
Indoor Version	QM-7316	\$5.95	\$5.50	\$4.75

### WIRELESS IN/OUT LCD THERMOMETER

Keep an eye on the outdoor and indoor temperature with ease. This thermometer is comprised of two parts. An LCD display/receiver to keep inside and a wireless outdoor temperature sensor which transmits the outdoor temperature back to the display. Great for monitoring computer server rooms, wine cellars, effectiveness of housing insulation, or for simply wanting to know the differentiation in temperature.

- No need to expose the LCD to the elements



SPECIFICATIONS		XC-0321		<div><div>1</div><div>YEAR</div></div> <div>WARRANTY</div>
Indoor Temperature Range	0°C to 60°C			
Outdoor Temperature Range	-40°C to 60°C			
Display Unit Requires	2 x AAA batteries			
Remote Requires	2 x AAA batteries			
Transmission Frequency	433.92MHz			
Receiver Dimensions	86(H) x 57(W) x 18(D)mm			
Sensor Dimensions	68(H) x 50(W) x 21(D)mm			
	CAT.	Qty 1+	Qty 3+	Qty 6+
Thermometer	XC-0321	\$19.95	\$17.70	\$15.70



### JUMBO DISPLAY IN/OUT THERMOMETER

One display that shows both the inside and outside temperatures simultaneously. It will also record the minimum and maximum temperatures. The outside temperature sensor is waterproof and is on a 3 metre cable. It also has a tilting bail for standing as well as a keyhole for wall mounting. Jumbo digits for the optically challenged.



SPECIFICATIONS	QM-7313
Temperature Range	-39.9°C to 49.9°C (-39.8°F to 122°F)
Battery	Requires AA
Dimensions	95(W) x 140(H) x 22(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Jumbo Display	QM-7310	\$19.95	\$17.95	\$15.95

### JUMBO DISPLAY THERMOMETER / HYGROMETER

Displays the temperature and humidity together on the one huge LCD display. It also has a min / max function (memory).

- Switch between C° and F°
- Requires AAA battery



SPECIFICATIONS	QM-7312
Temperature	-10°C to 60°C (14°F to 140°F)
Humidity	10 - 99% +/-5%
Accuracy	+/-1°C, +/-1.8°F
Dimensions	110(H) x 100(W) x 22(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Jumbo Display	QM-7312	\$24.95	\$23.35	\$19.70

## WIRELESS IN/OUT THERMOMETER/HYGROMETER

An advanced thermometer/hygrometer capable of measuring indoor and outdoor temperature, as well as relative humidity. The large easy to read LCD acts as a receiver unit for a separate outdoor sensor unit. It will record maximum and minimum temperatures for quick referral and conveniently displays the time of day. Ideal for temperature or humidity sensitive environments such as museums, greenhouses, or to check if your home and office is too dry or moisture laden. The LCD receiver unit is capable of receiving information from up to 3 sensor units, which are available separately (see Cat. XC-0324).



<b>SPECIFICATIONS</b>	<b>XC-0322</b>			
<b>Indoor Temperature Range</b>	0°C to 60°C			
<b>Remote Temperature Range</b>	-45°C to 65°C			
<b>Humidity Range</b>	1% to 99%			
<b>Transmission Frequency</b>	433.92MHz			
<b>Transmission Range</b>	Up to 100m open air			
<b>Power Requirements (Receiver)</b>	2 x AA alkaline batteries (not included)			
<b>Power Requirement (Remote)</b>	2 x AAA alkaline batteries (not included)			
<b>Receiver Dimensions</b>	95(H) x 114(W) x 25(D)mm			
<b>Sensor Dimensions</b>	51(H) x 63(W) x 25(D)mm			
	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 3+</b>	<b>Qty 6+</b>
Thermometer/Hygrometer	XC-0322	\$34.95	\$31.45	\$27.95
Extra Sensor	XC-0324	\$16.95	\$15.25	\$13.55

## FRIDGE THERMOMETERS

### DIGITAL FRIDGE/FREEZER LCD MINI THERMOMETER

See at a glance that your favourite food or beverage is at the correct temperature in the fridge or freezer. Hang it from a wire shelf, stand on a shelf or attach to a metal surface with the built-in magnet.

- Stylish design with white face and silver colour surround
- Selectable °C / °F



SPECIFICATIONS	QM-6323
Temperature Range	-19°C to 49°C
Digit Height	23mm
Batteries	1 x CR2025 included
Dimensions	68(L) x 44(H) x 12(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Mini Thermometer	QM-6323	\$9.95	\$8.75	\$7.75

### DIGITAL THERMOMETER FOR FRIDGE OR FREEZER

Keep your fridge at the right temperature all year round. Simply attach the sensor to the desired position in the fridge or freezer and the thermometer on the outside with the attached magnets or enclosed hook and loop strip. Set your preferred reading of °C or °F and then set the minimum and maximum temperatures with the alarm. If the fridge goes below or above these set temperatures the alarm will sound until you manually turn it off to investigate the problem.

- No more spoiled food ever again
- Shows room temperature at the touch of a button as well



SPECIFICATIONS	QM-7209
Room Temp Range	-10°C to 50°C
Fridge Temp Range	-50°C to 70°C
Display Size	26(W) x 13(H)mm
Fridge Sensor Cord	1m long
Requires	1 x AAA battery (supplied)
Dimensions	67(W) x 39(H) x 15(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Thermometer with Alarm	QM-7209	\$24.95	\$22.45	\$19.95



## CLOCKS

### LCD TOUCH SCREEN COUNTDOWN TIMER

An easy-to-use countdown timer for the kitchen, home gym, study, etc. Features a backlit touchscreen, fold-out stand for sitting on a desk or magnets for attaching to a metal surface like a fridge. It has a stylish appearance and the numbers scroll downward with every second and minute, making it mesmerising to watch. At the touch of a button it can be turned into a stopwatch count-up timer.

- Touch screen with white LED backlit display
- Countdown range: 99 minutes and 59 seconds
- 2 x AAA batteries required
- Dimensions: 80(H) x 80(W) x 25(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Countdown Timer	QM-6325	\$14.95	\$13.45	\$11.95

### TRAVEL WORLD TIME ALARM CLOCK WITH LED TORCH

With the twist of a knob this clock will automatically update the time zone to one of 18 time zones. A bright screen displays current time, time zone, full date, and current temperature. It also features an alarm clock. On the other end is a 3 LED torch! Ideal for any world traveller!

- Time Zones: Honolulu, Los Angeles, Denver, Chicago, New York, Rio De Janeiro, London, Paris, Cairo, Athens, Moscow, Dubai, India, Bangkok, Hong Kong, Tokyo, Sydney, and Wellington
- Batteries: Requires 2 x AAA batteries
- Torch: 3 x AG13 button batteries (included)
- Dimensions: 132(W) x 39(H) x 38(D)mm
- LCD Dimensions: 41(W) x 20(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Alarm Clock Torch	XC-0103	\$19.95	\$17.95	\$15.95

### LCD CLOCK WITH THERMOMETER

Slimline LCD clock that displays both the time and temperature simultaneously on a large, easy to read display. Stylish design with white face & silver coloured surround.

- Desk or wall mount
- 12/24 hour selectable
- °C / °F selectable
- Digit height: 35mm
- Temperature range: 0°C - 50°C
- Requires 2 x AAA batteries
- Dimensions: 215(L) x 73(H) x 22(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Clock with Temp	XC-0230	\$24.95	\$22.45	\$19.95

### LED CLOCK WITH AM/FM RADIO

Provides large digit display for easy reading - even with tired eyes, and dual alarm functionality with snooze. An AM/FM radio is built in, with digital tuning and an integrated antenna. Optional battery backup for clock, 2 x AA batteries required if desired.

- Battery back-up
- Snooze function
- Dual alarm
- 30mm digit height



SPECIFICATIONS	AR-1930
FM	87.5 - 108MHz
AM	522 - 1620KHz
Power	240V
Batteries	2 x AAA (Not Included)
Weight	410g (Excluding Batteries)
Power Cable Length	1.25m
Dimensions	131(W) x 58(H) x 120(D)

	CAT.	Qty 1+	Qty 3+	Qty 6+
	AR-1930	\$24.95	\$22.45	\$19.95

### LARGE DISPLAY LED CLOCK WITH AM/FM RADIO

Extra large digits provide easy viewing even if you can't find your glasses. Dual alarm option, with digitally tuned AM/FM radio. Auxiliary audio input for use with an alternative music source. Battery backup functionality using 2 x AAA batteries if desired.

- Large LED display
- AUX input
- Battery back-up
- Large 48mm digit height



SPECIFICATIONS	AR-1932
Power	240VAC
Batteries	2 x AAA (Not Included)
Weight	595g
Dimensions	230(W) x 110(H) x 90(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	AR-1932	\$39.95	\$35.95	\$31.95

### LCD WALL CLOCK WITH CALENDAR AND TEMPERATURE

This sleek device features a huge 194 x 110mm LCD to provide convenient time display at a glance. In addition to the time however, it also includes an alarm clock, calendar, day of the week, as well as the current temperature and humidity (indoor). It features an integrated stand and hang-hole for desktop or wall mounting. It's a great looking unit that will suit any decor.

- Features:
- Thermometer
- Hygrometer
- Alarm and snooze functions
- Time, date, and day of the week display

SPECIFICATIONS	XC-0225
LCD Size	194(W) x 110(H)mm
Time Format	12 Hour/24 Hour
Languages	7
Snooze Setting	1 - 60min
Temperature Range	-9.9 to +50°C (14.1 to 122.0°F)
Humidity Range	20 - 95% relative humidity
Batteries	3 x AA (Not Included)
Weight	540g (Including Batteries)
Dimensions	306(W) x 176(H) x 36(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	XC-0225	\$59.95	\$53.95	\$47.95



## OFFICE GADGETS

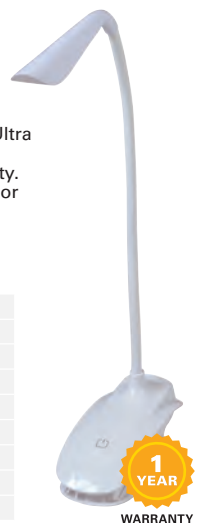
### LED DESK LAMP WITH CLAMP

Fantastically stylish with touch-sensing brightness control. It's rechargeable and will run for up to 12hrs depending on the brightness setting. The gooseneck allows you to position it just where you want, and the desk clamp keeps it firmly in place. Ultra bright, white COB LED for daylight white light. The LED head also features rubberised ABS for durability. So delightful it suits the workbench, bedside table, or study area all very well.

- 3 Level Adjustable Brightness
- Flexible Stand
- Touch Sensor Switch

SPECIFICATIONS	SL-3145
Max Brightness	120 Lumens
Battery	500mAh lithium polymer battery
Burn Time	Up to 12hrs
Recharge Time	5hrs
Weight	130g
Dimensions	115(L) x 55(W) x 380(H)mm
Material	ABS, Rubber
3 Level Brightness	100%, 70%, 30%

LUMENS	CAT.	Qty 1+	Qty 3+	Qty 6+
120	SL-3145	\$14.95	\$13.45	\$11.95





## OFFICE GADGETS (CONTINUED)

## KEYRING LASER POINTER

This laser keyring pointer is chrome plated, and has a keychain attached. Requires 3 x LR44 batteries, which are supplied.

- Very small, only 70mm long x 13mm dia
- Wavelength 670nm / Max output < 1mW
- Do not stare into beam

*This laser pointer has passed Aust. Standards for laser pointers. AS/NZS 2211.1:1997.*



CAT.	Qty 1+	Qty 5+	Qty 10+
ST-3102	\$14.95	\$13.35	\$11.70

## USB WIRELESS LASER PRESENTER

If you conduct presentations with PowerPoint or other suitable presentation software, this 2.4GHz wireless presenter will give you portable control of your slides, and a laser pointer too! It provides you with next / previous slide functionality, as well as screen blanking option. It includes a USB dongle for plug and play 2.4GHz functionality with any Windows computer. The USB dongle can also be stored inside the controller when not in use, so you don't lose it. It offers fantastic range with up to 10m transmission, so you don't have to be right by your computer for reliable operation.

## Features:

- Laser pointer
- Powerpoint presentation controls
- 2.4GHz wireless
- USB 2.0
- Up to 10m range
- Plug & play
- Ergonomic soft-touch design
- USB receiver fits inside presenter for storage and transport



SPECIFICATIONS	XC-5409
Wireless	2.4GHz
USB	2.0
Range	Up to 10m
System Requirements	Windows 2000/XP/Vista/7/8/8.1/10
Batteries	2 x AAA (Included)
Weight	20g (Excluding USB Dongle & Batteries)
Dimensions	Presenter: 116(H) x 38(W) x 28(D)mm USB Dongle: 59(D) x 18(W) x 9(H)mm

CAT.	Qty 1+	Qty 4+	Qty 10
XC-5409	\$34.95	\$30.95	\$27.95

## MINI 5GHZ 1080P HDMI WIRELESS AV SENDER

Power in your pocket! Perfect for travelling presentations, lecturing, or even home streaming from your laptop. Unlike most units for home and office, the transmitter for this unit is barely larger than a USB flash drive. It plugs straight into the HDMI socket on your laptop, using USB power. Wireless transmission is on the ultra-reliable 5GHz band for minimal interference and high quality transmission. The receiver is compact and can be placed up to 20m away! Infrared passback is included so you can control infrared devices at the source too. Stereo audio is also transmitted. A powerful package that's fully plug and play, so there's no fuss setup every time. HDMI 1.3 and HDCP 1.2 compliant for the ultimate in HDMI compatibility.

## Features:

- HDMI 1.3 / HDCP1.2
- 1080p full HD
- Point to point wireless configuration
- IR passback with 20-60kHz frequency
- Plug and play
- 20m transmission distance



SPECIFICATIONS	AR-1909
Maximum Transfer Rate:	10.2Gbps
IR Passback	20-60kHz
Transmission Distance	20m
Dimensions:	Transmitter: 89(W) x 15(H) x 39(D)mm Receiver: 132(W) x 20(H) x 95(D)mm

CAT.	Qty 1+	Qty 2+	Qty 4+
AR-1909	\$369.00	\$329.00	\$289.00

## 2GB DIGITAL VOICE RECORDER

A simple one key to record digital voice recorder with 2GB of inbuilt memory capable of recording up to 540 hours of audio. It features three recording modes; high quality (HQ), standard quality (SP) and long play (LP). Files can be played back or deleted on the device with ease and features voiceactivated recording which is great for use in lecture theatres or presentations. Includes USB cable and earphones.



SPECIFICATIONS	XC-0387
Memory	2GB Internal
Recording Modes	HQ, SP, LP
Recording Format	MP3 (HQ & LP), WAV (SP)
Recording Time	34hrs HQ / 134hrs SP / 540hrs LP
Battery	Requires 2 x AAA
Battery Life	Up to 27hrs HQ, 41hrs SP, 41hrs LP
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.0+
Dimensions	102(H) x 30(W) x 17(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
2GB	XC-0387	\$69.95	\$62.95	\$55.95

## 4GB DIGITAL VOICE RECORDER

A sleek and intuitive rechargeable voice recorder with touch button display and a generous 4GB of memory. Quick one-key recording means you won't miss an important part of a speech or radio broadcast. It features two recording modes; pulsecode modulation (PCM) and high quality (HQ) for capturing up to 69 hours of high quality audio. You can also set it to VOR (voice operated recording) and let the device record whatever it hears. A solid voice recorder ideal for students, journalists, musicians, private investigators, and business people. Includes earphones, tie clasp microphone and USB cable.



SPECIFICATIONS	XC-0389
Memory	4GB Internal
Recording Modes	PCM, HQ
Recording Format	WAV (PCM), MP3 (HQ)
Recording Time	12hrs PCM / 69hrs HQ
Battery	3.7V, 350mAh Li-ion rechargeable battery
Battery Life	Up to 17hrs PCM, 15hrs HQ
Recharge Time	Up to 3hrs
Compatibility	Windows 10, 8.1, 8, 7, Vista, XP, 2000, Mac OS X® 10.0+
Dimensions	100(H) x 36(W) x 9(D)mm

	CAT.	Qty 1+	Qty 4+	Qty 10+
4GB	XC-0389	\$99.95	\$89.95	\$79.95

## PORTABLE FAN FOR PHONES

Create that "hair in the wind look" the next time you take a selfie with this USB powered portable fan. Of course, it is also suitable for cooling yourself on a hot day!



CAT.	Qty 1+	Qty 3+	Qty 6+
GH-1292	\$4.95	\$4.45	\$3.95

## PROGRAMMABLE USB FAN

Keeps you cool and at the same time displays a pre-programmed message in thin air! Using the rotation of the blades and well timed LED controller, it will display a maximum 20 colour messages with 20 characters per message. Simply plug into the USB port on your computer and adjust the gooseneck for the optimum angle. Software supplied.

## Features:

- RGB SMD LED
- 5VDC USB
- On/Off switch
- 300mm gooseneck, 88mm dia. fan



CAT.	Qty 1+	Qty 3+	Qty 6+
GH-1031	\$19.95	\$17.95	\$15.95



## OFFICE GADGETS (CONTINUED)

### LED DISPLAY USB FAN

This is fun to look at and useful too! It's USB powered, but also features a full colour integrated display! Using the free app, you can connect to the fan via Bluetooth. From there you can configure display of time/temperature, or a configurable full colour text message! If that wasn't enough, upload up to 10 of your favourite photos - now THAT is amazing! The free app is available on Google Play or Apple iTunes. It's definitely going to get everyone talking in summer!

#### Features:

- Displays images and message
- Bluetooth connection
- USB powered

SPECIFICATIONS	GH-1021
Power	5VDC @ 1A
Weight	430g
Dimensions	194(W) x 194(H) x 92(D)mm



CAT.	Qty 1+	Qty 3+	Qty 6+
GH-1021	\$49.95	\$44.95	\$39.95

### GALILEO THERMOMETER 30CM 16-28°

This Galileo thermometer makes a beautiful addition to any home. It is named after Galileo Galilei, and works off his principle that the density of a liquid changes in proportion to its temperature. It is a sealed glass cylinder that is filled with liquid, and contains 7 glass vessels of varying mass. The vessels rise or fall as the temperature changes. No power required, and makes a great conversation piece as well as being practical.

#### Features:

- No power required
- Demonstrates density principles
- Beautiful to look at

SPECIFICATIONS	GG-2106
Temperature Indication	< 16 to > 28°C
Weight	310g
Dimensions	300(H) x 36(Dia.)mm



Cat.	Qty 1+	Qty 4+	Qty 8+
GG-2106	\$24.95	\$22.45	\$19.95

## ALCOHOL BREATH TESTERS

Readings taken with these devices are for reference only. In spite of its quality and accuracy, errors may occur due to operation or environmental conditions and we accept no liability or responsibility whatsoever for any consequences arising from the use of these devices.

### ALCOHOL BREATH TESTER WITH LCD

Check your blood alcohol content with this affordable pocket alcohol breath tester before getting behind the wheel. Easy one button operation; simply blow in the nozzle and within seconds it will display the reading on its backlight LCD. There is a compartment on the back of the unit to store up to 5 plastic nozzles. A small investment to ensure you retain your driving privileges and prevent potential accidents.

- Three kinds of unit conversion (%BAC / ‰BAC / mg/L)
- Audible alert when measurement over preset level
- Supplied with 10 mouthpieces - replacements available separately



SPECIFICATIONS	QM-7304
Detection Range	0.000 - 0.199% BAC
Accuracy	±0.010% BAC
Display	Digital LCD
Warm-up / Response Time	<20s / <5s
Power	Requires 3 x AAA batteries
Weight	68.5g (excluding batteries)
Dimensions	120(L) x 61(W) x 29(D)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Alcohol Breath Tester	QM-7304	\$54.95	\$49.45	\$43.95
Spare Mouth Pieces - Pack of 10	QM-7305	\$9.95	\$8.75	\$7.75

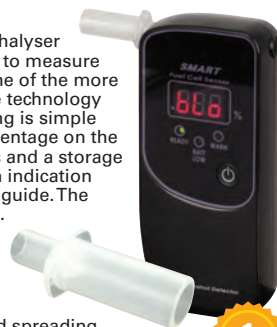
### FUEL CELL BREATHALYSER

This isn't the first or only personal breathalyser available, but it uses an internal fuel cell to measure alcohol in your breath. This method is one of the more accurate ways to test and is closer to the technology police use to patrol the streets too. Testing is simple and blood alcohol is presented as a percentage on the digital display. Includes 3 x mouthpieces and a storage case. Of course all measurements are an indication only and you should only use them as a guide. The safest blood alcohol to drive with is zero.

- Fuel Cell technology for accuracy
- Digital readout
- Protective case

### 6 PACK OF MOUTHPIECES TO SUIT

Buy a pack of extra mouthpieces to avoid spreading germs when testing blood alcohol concentration across different people.



SPECIFICATIONS	QM-7308
Detection Range	0% to 0.400% BAC
Accuracy	+/- 0.005% @ 0.050% BAC
Battery	1 x 9V
Weight	131g
Dimensions	125(H) x 56(W) x 24(D)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
Fuel Cell Breathalyser	QM-7308	\$169.00	\$151.95	\$134.95
Spare Mouthpiece	QM-7309	\$4.95	\$4.45	\$3.95

## LUGGAGE SCALES

### COMPACT DIGITAL LUGGAGE SCALE 50KG

With airlines ever-tightening baggage restrictions on over-weight fees, this handy scale is great for any traveler. It's compact, yet measures up to 50kg! A hook and strap are included to allow weighing of just about any type of luggage. Extremely useful for balancing your shopping between luggage on the return trip, so no one piece is over-weight! Provides measurement in grams and kilograms, as well as pounds and ounces. Bright display with clear numbers and blue-backlight. Battery included.

#### Features:

- Up to 50kg
- kg/g and lb/oz
- Blue backlight



SPECIFICATIONS	QM-7234
Batteries	1 x CR2023 (Included)
Weight	6.5kg
Dimensions	147(W) x 46(H) x 30(D)mm

CAT.	Qty 1+	Qty 3+	Qty 6+
QM-7234	\$19.95	\$17.95	\$15.95

## ELECTRIC CANDLES

### 3 PIECE FLAMELESS LED CANDLE SET

Who needs conventional candles, when you can experience the safe and convenient LED light technology with this 3 piece Flameless LED Candle set. Featuring a soft yellow glow that flickers just like a conventional candle would. This is also made from real wax in which is nearly indistinguishable from a flamed candles. The candle sets also comes with a remote control to switch them on or off from a distance. This will make a nice set for the lounge room, dining table or even the bedroom.

- 3 Piece LED candles
- Infrared remote
- Flameless technology
- 9 x AAA batteries required

REAL WAX



	CAT.	Qty 1+	Qty 3+	Qty 6+
Set of 3 with Remote	ST-3927	\$29.95	\$26.95	\$23.70



## VANILLA SCENTED FLICKERING LED CANDLE

Now you don't need real candles to enjoy the ambiance of a scented candle. This LED candle provides safety, while offering a real vanilla scent and authentic flickering light look. Requires 3 x AAA batteries.

### Features:

- Vanilla scent
- Authentic LED flickering



SPECIFICATIONS	ST-3961
Batteries	3 x AAA (Not Included)
Weight	202g
Dimensions	127(H) x 76(Dia.)mm

	CAT.	Qty 1+	Qty 3+	Qty 6+
	ST-3961	\$9.95	\$8.95	\$7.95

## BATHROOM GADGETS

### TOILET NIGHT LIGHT WITH DETECTOR AND RGB LED

This device sits on the toilet bowl under the seat and comes on in the dark when you approach it. The detector switches on a soft light that discretely illuminates the bowl without needing to turn the bathroom light on and disturbing others. It gets better! It lights up in 7 different colours: blue, green, red, white, aqua, yellow and purple! The kids will love it. The product is not limited to just the toilet. Use your imagination to solve that small lighting problem you may have in the caravan, RV or house itself.

- Activated by human movement
- Water resistant
- 5 stage dimmer
- Easy to clean
- Requires 3 x AAA batteries



	CAT.	Qty 1+	Qty 3+	Qty 6+
	GH-1353	\$14.95	\$13.45	\$11.95

### WATERPROOF SHOWER SPEAKER WITH BLUETOOTH® TECHNOLOGY

This waterproof shower speaker brings your favourite music to your bathroom. Listen to music wirelessly from your Bluetooth enabled Smartphone or laptop, and take calls wirelessly at the touch of a button. The device comes with a suction cap that allows you to stick it to any flat surface, and is powered by a built-in battery that can be charged with the supplied USB cable.



Bluetooth®

SPECIFICATIONS	XC-5630
Maximum Range	10m
Charging Time	3hrs
Operating Time	5hrs
Dimensions	93(L) x 85(H) x 45(D)mm, 99g



	CAT.	Qty 1+	Qty 3+	Qty 6+
Shower Speaker	XC-5630	\$27.95	\$25.15	\$22.35

### DUAL SIDED MAGNIFYING MIRROR

Never have trouble putting in those contacts or applying your make-up again. This dual sided mirror has one mirror at 1 x magnification and the other at 5 x magnification. The frame is rimmed with a LED light making it ideal to use at night or in poor light conditions.

- Mirror dimensions: 110(Dia.)mm
- Mirror and frame dimensions: 150(Dia.)mm
- Requires 3 x AA batteries (use SB-2425)
- Dimensions: 180(L) x 110(W) x 200(H)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Magnifying Mirror	GH-1067	\$29.95	\$26.90	\$23.70

## HEALTH & FITNESS

### SPORTS STOPWATCH

This handy 1/100th of a second sports timer will be a useful addition to any sports bag. Not only does it measure elapsed time for up to 24hrs, our water resistant stopwatch has a split time (Lap) function as well as alarm and calendar functions.

- Dimensions: 55(W) x 65(H) x 15(D)mm
- Includes 600mm lanyard



THOUSANDS SOLD

	CAT.	Qty 1+	Qty 3+	Qty 6+
Stopwatch	XC-0270	\$12.95	\$11.35	\$10.35

### NON CONTACT BODY THERMOMETER WITH SMARTPHONE APP

A fantastic solution for parents - a thermometer to read your child's temperature instantly! No need to wait up to five minutes with a thermometer in your child's mouth for an accurate result, this non-contact thermometer uses infrared radiation to instantly and accurately measure both body temperature and surface temperature. Use it to ensure you heat up your child's food to an acceptable temperature using the surface temperature mode, and then use the body temperature mode to check if your child is running a fever. It's so effective in fact, that the United States FDA has given their stamp of approval on it! If all that wasn't enough, there is even the ability to link the unit to your iPhone® or Android® Smartphone, and using a free App you can track your child's temperature over time (and more!), or even use it as a guide for planning pregnancy. See our website for info on the app.



SPECIFICATIONS	QM-7201
Temperature Range	0°C-50°C (32°F - 122°F)
Accuracy	±0.3°C
Response Time	0.5 sec
Power Off	Automatic
Measuring Distance	50-150mm
Dimensions	145(L) x 57(W) x 35(D)mm



	CAT.	Qty 1+
Body Thermometer	QM-7201	\$49.95

### BLUETOOTH® HEART RATE MONITOR WITH APP

Monitors your heart rate to ensure you are optimising your exercise, and also records your exercise duration, distance, speed and calories burned. Simply place the comfortable textile strap around your chest and it will wirelessly transmit heart rate information to a Bluetooth® enabled Smartphone or Tablet using a free app called Endomondo Sports Tracker. This app is available on Google Play® and the Appstore®.

#### Features of Endomondo app:

- Track your heart rate
- Track any outdoor sport including duration, distance, speed and calories
- Enter a workout manually, e.g., a treadmill run or weight training
- Get audio feedback for every mile or km while exercising
- See your route on a map
- Easy to change battery hatch



GET IT ON Google play	Available on the App Store	Bluetooth®
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SPECIFICATIONS	XC-0392
Battery Life	32 months (using 1 hour a day)
Pulse Rate Range	30 - 239bpm
Compatibility	iPhone® 4s/5, New iPad®, iPad® 4, iPad® mini, iPod® touch 5
Buckle Dimensions	64(L) x 40(W) x 12.9(D)mm
Textile Strap Dimensions	880(L) x 30(W)mm

	CAT.	Qty 1+
Heart Rate Monitor	XC-0392	\$19.95



## 2.4GHZ FOLDABLE FOLLOW ME SELFIE DRONE WITH CAMERA

Take cinematic selfies automatically with ease! It includes image recognition and advanced autopilot features such as headless flight, altitude hold, and optical flow positioning. All this results in amazing high quality photos and videos. The 120° wide-view camera captures the action in 720p video, while you take control via the downloadable app. Best-yet, the 3-second time allows you to trigger the camera then strike a pose! Think of the Instagram opportunities!

SPECIFICATIONS	GT-4218
Playing Time	Around 8 minutes
Recharging Time	Around 120~150 mins by charger
Control Range	Around 20~30 meters
Copter Battery	3.7V 850mAh Li-po battery

	CAT.	Qty 1+	Qty 3+
	GT-4218	\$149.00	\$133.95

## FOLDABLE FOLLOW ME DRONE

GT-4218

### FEATURES:

- HEADLESS MODE, ONE KEY RESET
- MOBILE PHONE APP CONTROL
- ALTITUDE HOLD + OPTICAL FLOW POSITIONING
- IMAGE RECOGNITION FOLLOW ME
  - APP SELF-TIMER AND DELAY 3 SECONDS TO TAKE PICTURES
  - HAND MOVEABLE 120° WIDE ANGLE 720P CAMERA

SKILL LEVEL: INTERMEDIATE



## 2.4GHZ R/C RACING FPV QUADCOPTER

This is a fast quadcopter with the added benefit of fully integrated first person view (FPV) technology. The integrated screen provides clear vision streamed back from the quadcopter. It also includes video / photo controls, as well as brightness and contrast adjustments. It features carbon fiber arms for both strength and agility, helping to reach its maximum speed of 50km/h. Lightweight to maximise flight time from the on-board battery pack, with convenient USB recharging when it returns home. The remote control also includes a rechargeable battery pack, an important feature when it includes the screen.

SPECIFICATIONS	GT-4202
Batteries	Quadcopter: Rechargeable Battery Pack Remote Control: 3.7V @ 450mAh
Weight	115g (including battery pack)
Dimensions	155(W) x 155(D) x 65(H) (excluding props)

	CAT.	Qty 1+	Qty 3+
2.4GHz R/C Racing FPV Quadcopter	GT-4202	\$249.00	\$219.00
SPARE PARTS	CAT.	Qty 1+	Qty 3+
Spare Battery	GT-4201	\$14.95	\$13.45
Spare Blades - Pack of 4	GT-4203	\$4.95	\$4.45

## 2.4GHZ R/C RACING FPV QUADCOPTER

GT-4202

### FEATURES:

- FULLY INTEGRATED VIDEO STREAMING
- LARGE DISPLAY ON REMOTE CONTROL
- LIGHTWEIGHT

SKILL LEVEL: ADVANCED







## ▼ QUADCOPTERS

### 2.4GHZ MICRO R/C QUADCOPTER

So tiny! It's just 30mm wide, it's so small it can fit inside the remote control! That doesn't mean it lacks features though. This micro quadcopter has automatic 360° flip functionality for amazing flight tricks, as well as a 1-key return function. When you're done, put it back inside the remote! So amazing to watch, and very entertaining to fly. The 2.4GHz remote provides stable control communication too. Includes spare rotors.

#### Features:

- 6-axis
- 360° flip
- 1-key return
- Stores in remote control



SKILL LEVEL: BEGINNER

CAT. Qty 1+  
GT-4214 \$29.95

### 2.4GHZ MINI R/C QUADCOPTER

Now you can show off your crazy pilot skills, even if you don't really have any! This amazing quadcopter features one-touch 360° flip action sure to impress. It also features headless flight mode, and return to home functions. It's compact in size, but provides you with loads of entertainment! USB recharger included, along with 4 spare rotors.

#### Features:

- One-key flip
- Headless mode
- 6-axis
- Return to home



SKILL LEVEL: BEGINNER

SPECIFICATIONS	GT-4190
Batteries	Quadcopter: 3.7V @ 150mAh Rechargeable Remote Control: 2 x AA Batteries (not included)
Weight	23g (including battery)
Dimensions	82(W) x 82(D) x 33(H)mm

CAT. Qty 1+ Qty 3+  
GT-4190 \$39.95 \$35.95

### 2.4GHZ R/C QUADCOPTER WITH CAMERA AND IR BATTLE MODE

Have you ever thought about having a battle game with your friends or families? This DIY Battle drone can help you achieve it. First build the drone with very easy to read instructions. The drone features 2.4GHz communication, gyro-stabilization for a smooth flight, and a durable construction to withstand some harsh crash landing. Take aim at your enemy and be the first to land, 4 direct hits to take them down. Time to battle

#### Features:

Battle mode: Great fun of battling with your families and friends  
Fun of Battling: Every hit the drone will show different responses. After 4 hits, drones slowly land and shut off. Kindly refer the user manual for shooting steps.

Great stability: The with 6-Axis gyro and altitude hold mode help you operate the battle drones and build your flying skills  
Multi-functions: High/medium/low speed mode, 3D flips and one button take off / landing / emergency stop functions.  
Headless mode: Completely solving "loss of orientation" problems.



SKILL LEVEL: INTERMEDIATE

### 2.4GHZ SKY WALKER CAGE R/C QUADCOPTER

Fly through the air, climb up walls and roll across the ground with this fun mini quadcopter! The protective plastic and carbon fibre cage shields the quadcopter from impact and prevents damage to the blades. It also rights itself after crashing, saving time and making take offs hassle-free. The six-axis gyro and four propellers give the quadcopter 360° movement, stability and control - offering a better user experience than traditional remote control helicopters. The LED light in the canopy makes it super fun for night flying! When charge is low, simply plug the quadcopter into a USB socket using the enclosed USB charging cable. With a range of up to 50 metres, this is a fantastic quadcopter for beginners 8 years and up.

The rollcage can be removed.  
Stock may not match image colour.



SKILL LEVEL: BEGINNER

SPECIFICATIONS	GT-3952
Channels	4
Axis	6
Transmitter	2.4GHz
Drone Battery	3.7V LiPo rechargeable
Remote Control	Requires 4 x AA Batteries
Flight Time	6 min
Charge Time	60-90 mins
Recommended For Ages	8+
Dimensions (With Rollcage)	92(L) x 96(W)mm

	CAT.	Qty 1+	Qty 3+
Quadcopter	GT-3952	\$49.95	\$44.95

#### Important Safety Information!

In operating drones you become a pilot with responsibilities and must comply with rules set by relevant government authorities. Before you fly a drone be sure to check out the safety information guides put out by the relevant authorities shown below. You can download these guides from our website, pick up the guide in our store, or by visiting the following websites:

AU: [www.casa.gov.au/rpa](http://www.casa.gov.au/rpa)  
NZ: [www.caa.govt.nz/rpas](http://www.caa.govt.nz/rpas)



SPECIFICATIONS	GT-4220
Drone battery	3.7V 350mAh LiPo (about 10.5g)
Battery size	38 x 20 x 7mm
Charging time	About 50mins by USB
Flying time	About 6-7mins
Control Range	Around 40m
Controller battery/pcs	3 x AAA battery ( not included )
Function:	Up/down, turn left/right, forward/backward, left/right sideward flight, 3D flips, headless mode,
Drone weight	About 27.5g (without battery)
Product size	105(L) x 105(W) x 50(H)mm

CAT. Qty 1+ Qty 3+  
GT-4220 \$59.95 \$53.95



## QUADCOPTERS (CONTINUED)

### BUILD AND FLY CONSTRUCTION BLOCK QUADCOPTER

Here's a drone that you build yourself! It is supplied with 6 motors with rotors, 45 plastic blocks and detailed instructions to build 4 different configurations. It is also compatible with other construction blocks, including LEGO®, so you can make your own creations. A rechargeable Li-ion battery and USB cable are included, along with a 2.4GHz remote control. There is a high or low-speed option for beginners, and also has a headless mode to make it easier to fly. Ages 14+.



#### Features:

- Channels 6
- Gyroscope
- Transmitter 2.4GHz
- Drone Battery 3.7V 900mAh Li-ion rechargeable
- Remote control requires 4 x AA batteries
- Flight time Up to 12 min
- Charge time 60-90 mins
- Recommended for ages 14+
- Dimensions (6-axis model): 142(W) x 130(D) x 45(H)mm (Approx.)



SKILL LEVEL: INTERMEDIATE



	CAT.	Qty 1+	Qty 3+
	GT-4192	\$69.95	\$62.95

### 2.4GHZ MOTION ACTIVATED QUADCOPTER

This is definitely a unique quadcopter with one key motion control instead of a traditional remote controller. You control it by gesturing with one hand and using the one button on the mouse looking controller. It has altitude hold and flies exclusively in headless mode which makes learning to fly this unique drone a bit easier. Once you have that down pat hit the forward button to flip and presto you are looking like you have been flying for years. This is an inexpensive quadcopter that is great for the novice.

#### Features:

- Motion Controlling, 360° flips, Auto take off & landing, turning & speed adjust
- 2.4G radio control distance about 20m
- 3.7V 280mAh rechargeable Li-po battery for about 5-8mins flying time
- 3xAAA battery needed for transmitter (not included)
- Lightweight and durable materials



SKILL LEVEL: INTERMEDIATE



<b>SPECIFICATIONS</b>	<b>GT-4224</b>
<b>Batteries</b>	3.7V 280mAh rechargeable Li-po
<b>Dimensions</b>	155(L) x 155(W) x 35(H)mm

### 2.4GHZ R/C QUADCOPTER WITH 720P CAMERA AND WI-FI FPV

A powerful quadcopter for hours of fun in the sky! It uses your own smartphone's capabilities to provide FPV video streaming via Wi-Fi from the on-board camera. A mount is provided to fasten your phone to the remote. One very cool feature about this quadcopter is the altitude-hold function, which can be great for enhancing stability of video. The quality HD camera provides high image quality. USB recharging (for quadcopter) and spare rotors included.

#### Features:

- 6-axis
- Built-in HD camera
- WiFi
- Altitude hold



SKILL LEVEL: INTERMEDIATE



SPECIFICATIONS	GT-4194		
Batteries	Quadcopter: 3.7V 500mAh Rechargeable Remote Control: 3 x AA (not included)		
Weight	87g (including battery)		
Dimensions	280(W) x 280(D) x 90(H)mm		
	CAT.	Qty 1+	Qty 3+
2.4GHz Wi-Fi FPV Quadcopter	GT-4194	\$99.95	\$89.95
SPARE PARTS	CAT.	Qty 1+	Qty 3+
Spare Battery	GT-4195	\$9.95	\$8.95
Spare Blades	GT-4191	\$4.95	\$4.45

### 2.4GHZ R/C QUADCOPTER WITH ADJUSTABLE CAMERA AND WI-FI FPV

This unassuming quadcopter rapidly transforms from a compact bundle into a powerful video-enabled quadcopter! Intelligent use of technology provides FPV capabilities using your own Smartphone. The video is transmitted via Wi-Fi to display right on your own screen, providing quality 720p footage with a 120° wide glass lens. The smart remote control provides recording functions, as well as allowing the camera angle to be adjusted while flying. It's compact but loads of fun. 900mAh Li-Po rechargeable battery included, along with a charger and spare rotors. Ages 14+.



#### Features:

- 720p 120° wide angle camera
- 6-axis
- Wi-Fi enabled video

Note: Smartphone not included



SKILL LEVEL: ADVANCED



<b>SPECIFICATIONS</b>	<b>GT-4198</b>		
<b>Batteries</b>	Quadcopter: 3.7V @ 900mAh Li-Po Rechargeable Remote Control: 4 x AA (not included)		
<b>Weight</b>	169g (including battery pack)		
<b>Dimensions</b>	Folded: 185(H) x 85(Dia.)mm (no rotor guards) Deployed: 290(W) x 290(D) x 180(H)mm (with rotor guards)		
	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 3+</b>
Wi-Fi FPV Quadcopter	GT-4198	\$179.00	\$160.95
<b>SPARE PARTS</b>	<b>CAT.</b>	<b>Qty 1+</b>	<b>Qty 3+</b>
Spare Blades	GT-4200	\$4.95	\$4.45
Spare Battery	GT-4199	\$14.95	\$13.45



## RC CARS

### HI-CALIBRE 27/40MHZ REMOTE CONTROL CAR

These highly detailed 1:58 scale sports cars feature working LED headlights and red reverse lights, and come with 4 tiny red witches hats for refining your driving skills or for simply making mini crashes more dramatic. The car, remote control and witches hats all fit snugly inside the Hi-Calibre shell. The cars are recharged by plugging into the remote control. Choose between 8 different colours, and two frequencies (27MHz or 40MHz) so you can race two at the same time.

#### Features:

- Adjustable/detachable antennas
- Remote requires 2 x AA batteries
- Charge time: 5 minutes
- Remote control: 27MHz or 40MHz
- Suitable for ages 3+
- Car dimensions: 75(W) x 35(W) x 20(H)mm approx.



	CAT.	Qty 1+	Qty 3+
1:58 Scale	GT-4205	\$19.95	\$17.95

### BAJA BLUE 2.4GHZ REMOTE CONTROL CAR - 1:24 SCALE

This R/C car will provide hours of fun with its oversized tyres and quality suspension, helping it to run on variable terrain. The quality 2.4GHz trigger-style remote provides you with great range and control. No recharging required, just install your favourite AA batteries and you're set (4 x AA for vehicle, 2 x AA for remote. Not included).

#### Features:

- Up to 15km/h
- Suspension
- Over-sized tyres



SPECIFICATIONS	GT-4204
Batteries	Car: 4 x AA (not included) Remote: 2 x AA (not included)
Weight	274g (excluding batteries)
Dimensions	208(D) x 147(W) x 87(H)mm

	CAT.	Qty 1+	Qty 3+
	GT-4204	\$29.95	\$26.95

### TWISTER REMOTE CONTROL STUNT CAR

This rechargeable RC car avoids getting stuck by flipping over once it hits an obstacle. Marvel as you easily perform 360° spins, tricks or race up to 12kmh. Supplied with USB charging cable, 4.8V AAA 700mAh rechargeable battery pack for the vehicle and 2 x AA batteries for the remote control.

#### Features:

- Charge via USB
- 2.4GHz remote includes batteries
- 1:28 scale
- 15cm long
- Ages 6+



	CAT.	Qty 1+	Qty 3+
	GT-4206	\$39.95	\$35.95

### 3-IN-1 R/C QUADCOPTER, TANK & CAR WITH CAMERA AND FPV

This 3-in-1 RC vehicle ticks all the boxes and gives you some real RC fun with an awesome quadcopter, a tank, and a jumping car at the same time. Whether you feel tired of flying, driving or jumping, transform it into another shape and explore more fun. Thanks to the WiFi camera, you can enjoy the FPV within about 50m and record the stunning moments from the sky, on the ground, or in mid-air with your phone.

#### Features:

- 3-in-1 RC vehicle, i.e. more fun, including aerobatic maneuvers, running, and jumping
- 0.3MP camera presents the real-time FPV on your phone via Wi-Fi connection
- Altitude Hold allows you to capture every memorable moment clearly and smoothly
- Headless Mode makes it unnecessary to take the orientation into account
- One Key Takeoff / Landing / Return makes it much easier for beginners to fly
- Drone mode: compass mode, one key take off, one key landing, altitude hold mode, emergency stop, Wi-Fi
- 0.3mpx camera
- Tank mode: forward/backward, turn left/right
- Jumping car mode: forward/backward, turn left/right, jump



Note: Smartphone not included

SPECIFICATIONS	GT-4222
Control Range	Around 100 metres
WIFI transmission range	50m
Battery	3.7V 950mAh Lithium-ion
Play Time	About 10mins
Charging Time	120mins by USB Charger
Controller battery	4 * AA battery (not included)

	CAT.	Qty 1+	Qty 3+
	GT-4222	\$129.00	\$115.95





### 2.4GHZ BLUE R/C ROCK CRAWLER

An awesome blue off-road buggy approximately 1:16th scale. It has dual-engine drive. One in the front, and one in the back! It has over-sized tyres and big shock-absorbers, with imitation roll cage. Just like a dune-dwelling, rock-crawling buggy in the real world! The trigger-style remote control provides fast and precise action. Hours of fun, with rechargeable battery pack and recharger included. Remote requires 2 x AA batteries.

SPECIFICATIONS	GT-4207
<b>Batteries</b>	Buggy: 4.8V @ 500mAh Ni-Cd Rechargeable Remote Control: 2 x AA (Not Included)
<b>Weight</b>	498g (Including Battery Pack)
<b>Dimensions</b>	270(D) x 165(W) x 125(H)mm

	CAT.	Qty 1+	Qty 3+
1:16 Scale	GT-4207	\$39.95	\$35.95



#### FEATURES:

- SHOCK-ABSORBERS
- OVER-SIZED TYRES
- FULL FUNCTION

SKILL LEVEL: INTERMEDIATE



### 2.4GHZ BLACK R/C ROCK CRAWLER

Let's just say it - this is one awesome looking rock-crawler truggy. With power to each of its 4-wheels, there's not a lot this beast can't tackle. It's also HUGE! The oversized tyres and massive clearance make light work of any sort of terrain, with long-travel suspension to tackle uneven ground. A powerful system using a heavy-duty battery pack for loads of fun. The 2.4GHz trigger-style remote control provides precision handling with ease. Hours of entertainment!

SPECIFICATIONS	GT-4208
<b>Batteries</b>	Truggy: 6V @ 600mAh Ni-Cd Rechargeable Remote Control: 2 x AA (Included)
<b>Weight</b>	1.26kg (Including Battery Pack)
<b>Dimensions</b>	405(D) x 243(W) x 223(H)mm

	CAT.	Qty 1+	Qty 3+
	GT-4208	\$89.95	\$80.95



#### FEATURES:

- ULTRA-HIGH CLEARANCE 4X4 ACTION
- LONG-TRAVEL SUSPENSION
- 2.4GHZ REMOTE CONTROL

SKILL LEVEL: INTERMEDIATE



### 2.4GHZ ULTRA-FAST R/C TRUGGY

This is an ultra-fast truggy, with a top speed of 38km/h! Hours of high speed fun, with quality sealed ball bearings, and metal hardware in many places for durability. The 2.4GHz trigger-style remote provides fast and simple control, while 2.4GHz communication allows fantastic range. Powered by an ultra-light Li-ion rechargeable battery for fast recharging and high speed. Includes recharger (remote requires 2 x AA batteries, not included).

SPECIFICATIONS	GT-4209
<b>Batteries</b>	Truggy: 9.6V @ 700mAh Li-Ion Rechargeable Remote Control: 2 x AA (Not Included)
<b>Weight</b>	102g (Including Battery Pack)
<b>Dimensions</b>	340(D) x 266(W) x 130(H)mm

	CAT.	Qty 1+	Qty 3+
1:12 Scale	GT-4209	\$119.00	\$106.95
SPARE PARTS	CAT.	Qty 1+	Qty 3+
Spare Battery	GT-4210	\$24.95	\$22.45
Spare Shell	GT-4211	\$14.95	\$13.45
Spare Drive Shafts	GT-4216	\$9.95	\$8.95
Upper / Lower Control Arms - Pair	GT-4213	\$12.95	\$11.45



#### FEATURES:

- 38 KM/H TOP SPEED
- SEALED BALL BEARINGS
- METAL PARTS

SKILL LEVEL: ADVANCED



## FUN & GAMES

### ANYWHERE TABLE TENNIS

Sometimes you really just need to drop everything for a spontaneous game of table tennis, but you probably find yourself without an appropriate table tennis table to use. Tragic - we know! But fear no more - with our Instant Table Tennis Game you can turn an ordinary table into hours of table tennis fun in a flash! The kit includes a retractable net that extends up to 1.7m with spring-loaded posts to hold firmly in position. Of course this isn't handball, so you also get a mesh bag with two paddles and two ping pong balls. Now there's no excuse to not scratch your ping pong itch, with an impromptu game.

- Collapsible net with spring-clamp net support posts
- Includes two paddles and two balls

Table not included.



SPECIFICATIONS	GH-1162			
Max Net Width	1.7m approx			
Net Height	150mm from table (approx.)			
Maximum Table Thickness	50mm			

	CAT.	Qty 1+	Qty 3+	Qty 6+
Table Tennis Set	GH-1162	\$19.95	\$17.95	\$15.95
Ping Pong Balls - Pack of 6	GH-1163	\$9.95	\$8.95	\$7.95

### INFRARED GUN & MECHANICAL ALIEN BUG SET

Train and master the weapon of your choice and get ready for the apocalyptic invasion of alien bugs! This hyper-real laser gun can simulate a pistol, shotgun, submachine gun and even rocket launcher. At 40m striking distance with vibration attacking alert, you can pick any battleground to test yourself in tricky scenarios. The alien bug pops belly up when shot on target, a few seconds later they pop back to life and scurry away. Purchase additional alien bugs (GT-4073) available separately and blast away hours of fun. Once mastered, you can setup up to four teams for a laser tag with your human counterparts.

- Includes 1 x laser gun and 1 x alien bug
- Gun battery: Requires 4 x AA
- Bug battery: 3.7V 45mAh rechargeable/USB charging cable supplied
- Recommended for ages: 8+
- Gun dimensions: 300(L) x 172(W) x 52(D)mm
- Bug dimensions: 75(L) x 57(W) x 45(H)mm



	CAT.	Qty 1+	Qty 3+
Gun with 1 Alien Bug	GT-4072	\$54.95	\$49.95
Additional Alien Bug	GT-4073	\$19.95	\$17.95



Shop online for your Jaycar Electronics products and check out our latest products and promotions on our website.

Visit Our Online Store:  
[www.jaycar.com.au](http://www.jaycar.com.au)

## NOVELTY

### REMOTE CONTROLLED SECRET FARTER

We had lots of fun testing this remote controlled high-tech replacement for the traditional Whoopee Cushion. Just hide the box near your intended victim and activate it from up to 15 metres distance with your remote control button. Not only will they be embarrassed, they won't even know who is responsible. Great fun at home or the office.

- 7 different realistic fart noises
- Requires 4 x AA batteries
- 1 x 12V battery for key fob (supplied) Use SB-2376



	CAT.	Qty 1+	Qty 3+	Qty 6+
Secret Farter	GH-1088	\$19.95	\$17.70	\$15.70

### USB PLASMA BALL

Create dazzling lighting effects with this USB Powered Plasma Ball that will surely impress your colleagues! Plasma is the fourth state of matter - as the ball becomes energised, the gases inside light up and turn into plasma. By touching the outside of the ball, you provide a path for the energy to escape, so you can produce amazing effects.

- Requires 4 x AAA batteries for portable use
- Dimensions: 130(H) x 100(W)mm



	CAT.	Qty 1+	Qty 3+	Qty 6+
Plasma Ball	GE-4089	\$19.95	\$17.95	\$15.95

### USB KEYSTROKE PRANKSTER

Unleash moments of confusion and panic on unsuspecting victims with what appears to be a USB drive. Simply plug it into their computer and it will either randomly type sentences, engage capslock or move the mouse on their PC. Little switches allow you to control the prank option and a dial will adjust the frequency. It's advisable to keep the frequency low to avoid suspicion. PC compatible.

- Prank capslock, keyboard, mouse or mixtures of all three
- Dial to adjust frequency from 5 seconds to 15 minutes
- Dimensions: 34(L) x 17(H) x 7(D)mm



IT'S TINY!

	CAT.	Qty 1+	Qty 3+	Qty 6+
	GE-4300	\$29.95	\$26.95	\$23.70

### THE USELESS BOX

One mystical black box with a single toggle switch. Every time you flip the switch, a little finger pops out from the box and turns itself off. No one on this planet has yet figured out a use for this, hence the name 'The Useless Box'. There is one thing however that we did notice, this magical box leaves anyone who comes into contact with a mesmerised smile on their face.

- Battery: Requires 2 x AA batteries
- Dimensions: 140(H) x 80(W) x 75(D)mm

You've got to watch the video!



IT'S ADDICTIVE!

	CAT.	Qty 1+	Qty 3+	Qty 6+
	GT-3706	\$34.95	\$31.45	\$27.95

## Monthly Specials and Promotions:

Lookout for our monthly promotions in store and online.

### Delivery Details:

Name	<input type="text"/>		
Address	<input type="text"/>		
	<input type="text"/>		
State	<input type="text"/>	Postcode	<input type="text"/>
		Country	<input type="text"/>
Phone	<input type="text"/>		
Email	<input type="text"/>		

**If you have used our mail order before (else leave blank):**

Please provide your  
account number:

Has your billing  
address changed since  
your last order?

☐ Yes ☐ No



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**Phone:** +61 (02) 8832 3245  
**Fax:** +61 (02) 8832 3118  
**Office Hours:** Mon-Fri 8.30-5.30,  
 Sat 8.30-5.00 (AEST)

[illegible]

*FREIGHT CALCULATOR		
INVOICE VALUE	ROAD FREIGHT	PREMIUM FREIGHT*
\$10 - \$99.99	\$7.00	\$9.00
\$100 - \$199.99	\$9.00	\$11.00
\$200 - \$499.99	\$12.00	\$16.00
Over \$500	\$17.00	\$23.00
Over 20kg	POA ^	POA ^
Overseas Airmail	POA ^	N/A

**Nerd Perks Member Number, Trade Card Number, or Promotional Code:**

**GOODS TOTAL****INSURANCE<sup>®</sup>****FREIGHT<sup>A</sup>****SUBTOTAL**

TOTAL

(Min order \$10)

\$1 per \$100 value or part  
there of. Australia only.  
See terms and conditions  
for details.

Aerosol, flammables, heavy and bulky items can only be sent by road.

**Out of stock lines:** Items under \$10 are not back ordered. Please re-order once item(s) are in stock. If your order is unusually bulky, heavy or fragile, we may choose to send your goods to you by road at our expense. We cannot send goods by road to a PO Box. However, if you feel your order may fit into this category, please include a street address - either work or home.

**Freight information:** Simply add the amount shown in the freight charges chart above. Don't forget to add extra amount for insurance if you require this service.

**Final check:** Please make sure that you have given full details of the products you require, the correct prices, the full postage or transportation cost, plus make sure that your name and address are legible. Your order will arrive faster if all details given are correct. Minimum order is \$10.

**14 day satisfaction guarantee:** Provided that you have returned the goods in original condition (and that means the outer package, if any, must be unmarked). You must keep your invoice as proof of purchase. We will not refund post, packaging insurance or other transport charges. Freight on returned goods must be pre-paid. Do not return goods by COD. Please do not ask for a refund after 14 days from purchase date (this allows for transportation delays).

*\*Overnight delivery. Available on request subject to conditions. Max physical/cubic weight 5kg. Area must be covered by next day service (phone for details). No PO Box address.*

<sup>†</sup>One whole dollar per \$100 goods value or part thereof (Australia only). See Terms & Conditions for details.

<sup>^</sup>POA: Our staff will calculate the freight charge based on the order, freight method and destination. Staff will promptly contact you to advise of the charge.

*#Orders made before 12:00pm delivered next working day for Metro areas, other areas 1-2 working days. Street addresses only - no delivery to PO Boxes.*

### Payment Details:

<input type="checkbox"/> Cheque/Money Order in A\$ (do not post cash)	<input type="checkbox"/> Credit Account (approved customers)	<input type="checkbox"/> Gift Card
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**or Credit Card:**

<input type="text"/>	Mastercard	<input type="text"/>	Visa	<input type="text"/>	Amex <sup>††</sup>	<i>†† AMEX incurs a non-refundable 2.7% + GST surcharge.</i>
Credit Card Number						
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Expiry [MM/YY]			Name on Card			
<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Card Security Code			Signature of Cardholder			
<input type="text"/>			<input type="text"/>			



# Terms & Conditions

**DISCLAIMER** All possible care has been taken in the preparation of this catalogue. However, specifications and particulars in relation to the products referred to in this catalogue are subject to change without prior notice. Some photographs contain samples which are representative only. Stocked item may vary in colour and look. Jaycar Electronics will not be held liable for any errors or omissions.

**PRICES** All prices quoted in this catalogue include Goods and Services Taxes (GST) and are current at the time of printing. So you can be confident of price stability. At Jaycar Electronics, we make every endeavour to maintain prices for the life of the catalogue. However, factors beyond our control (such as changes in foreign currency exchange rates, changes in base material costs etc.) may vary costs and we reserve the right to amend prices accordingly.

**STOCK AVAILABILITY** At Jaycar Electronics we are constantly seeking new products and due to the rapid developments within the electronics industry some products in this catalogue may become obsolete or discontinued during its life. In the event of this happening we apologise for the inconvenience and where possible will substitute a similar product of equal or better quality.

**OUR RAINCHECK** If your local Jaycar Electronics store has sold out of a currently advertised line, we will be happy to issue you with a 'raincheck'. This 'raincheck' can be presented as soon as the stock arrives and you can buy the original item (or its comparable product) at the advertised price - even if the original promotion has ended. 'Rainchecks' do not apply to items that have been advertised as 'limited', 'discontinued', 'surplus' or 'clearance' ranges.

**'CHANGE OF MIND' RETURNS** Although not obligated to do so, at Jaycar Electronics we appreciate that you may have second thoughts about your purchases and will give a 'Change of Mind' refund if goods\* are returned within 7 days (14 days for mail order and internet purchases). For 'Change of Mind' purchases, goods can only be accepted back for refund or exchange in 'as sold' condition including undamaged original packaging, complete instruction books, manuals, accessories, etc. If freight expenses of any type have been incurred, these are not refundable. We regret that any cash, credit card, or EFTPOS refunds over \$250 must be refunded by cheque for security reasons. Jaycar does not provide credit notes. Your Sales Docket must accompany all returns.\*Note: Refunds on 'Change of Mind' purchases do not apply to books, batteries, headphones, health products, semiconductors, computer software, all recordable media, some tools and non multimeter test equipment (including cathode ray oscilloscopes), step-down transformers (240-100V), some party lighting and associated products.

**WARRANTIES** Jaycar warranty period is 3 months from date of purchase, or such longer period as stated in this catalogue. Many products carry one year, two year, five year, or lifetime warranty or may qualify for over-the-counter replacement. These items are identified in the catalogue by the icons explained on page 5. If any defect in materials or workmanship in product sold by Jaycar Electronics is identified and notified to us within the warranty period then we will, at our discretion repair or replace the product. Jaycar Electronics does not accept any liability beyond this for consequential loss. Warranty is subject to us being satisfied that a defect was caused by defective workmanship or materials and was not caused by or was not substantially contributed to by other factors beyond our control, including (but not limited to) defective installation, maintenance, or repair; alterations or modifications of the product in a manner not recommended by the manufacturer; or any neglect, misuse or excessive use. The original Sales Docket or cash receipt must accompany warranty claims to provide starting date of the warranty period.

**KIT WARRANTY** Most kits are successfully constructed with few problems however, once the kit is under construction all warranty is void, as we cannot guarantee assembler's workmanship or components that have been used.

**STATUTORY WARRANTIES** Any statutory warranties applicable to your purchase will be honoured by Jaycar in addition to the warranties set out herein. If there is any conflict between any warranty herein contained and a statutory warranty, the terms of the statutory warranty will prevail.

**FREIGHT CHARGES RELATING TO WARRANTY ITEMS** Warranty repairs or replacements of goods is free of charge however freight charges to and from the service department is required to be paid by the customer.

**TRADE CARD** If you are professionally engaged in some aspect of the electronics industry on a daily basis, you may qualify for a Jaycar Electronics Trade Card. This facility is available in every store including TECHSTORE, to provide you with the opportunity to purchase at special trade prices. Simply call into your local Jaycar store and ask the manager or if you are a TECHSTORE customer email us at techstore@jaycar.com.au. We can provide you with convenient

locations, fantastic service and great prices! (Not available for transactions outside Australia and New Zealand.)

**REWARDS CARD** For a full list of terms & conditions go to [www.jaycar.com.au/rewards](http://www.jaycar.com.au/rewards)

**ACCOUNT FACILITIES** Jaycar Electronics is happy to provide account facilities for the following organisations:

- Schools (Government & non-Government), TAFE, Colleges and Universities
- State & Federal Government Depts, including research facilities
- Hospitals
- Mining companies
- TV & Radio Stations
- ALL public ('LTD') companies

ALL 'Pty Ltd' companies, Sole Traders or Partnerships must complete an account application form. Simply write to 'The Financial Controller', PO Box 7172 Silverwater NSW 1811. If you are one of the above you can buy from us on a 30-day (strictly from invoice) account. The invoice will go with the goods or to your accounts payable office (you nominate). Non Payment of monies due will be cause to discontinue supply and to commence recovery procedures.

**RECOVERY OF MONIES OWED** In the event that Jaycar needs to recover monies owed then the full balance on the account becomes due and payable and all costs of recovering this money will be borne by the debtor.

**TECHSTORE - MAIL ORDER & INTERNET PURCHASES** For Mail Order & Internet Purchases special conditions apply:

**Goods** - Aerosols, flammable, heavy and bulky items cannot be sent by post.

**Payment** - via cheque, money order or credit card (MasterCard, Visa, American Express)

**Minimum Order Value** - Mail order & Internet purchases have a minimum order value of \$10.

**International Orders** - Please remember you may have to pay customs and importing charges at your end (if applicable). We cannot supply full customs documentation, but all parcels include required customs dockets. Should you require to return goods for any reason from outside Australia it is essential that customs documentation is included. If customs dockets are not included it can be a costly exercise to have the goods cleared by Customs and the customer must pay this charge. Failure to include customs documentation may result in long delays. Note: Jaycar Electronics cannot accept any responsibility or liability for the suitability of any product for use outside Australia, nor its compliance with local regulations.

**Freight** - Various freight options and rates are given on the order form. After selecting the freight option that suits you, please clearly mark it and add these additional charges to the total on your order. Goods cannot be delivered to a PO box via road or air courier service.

**Missing or Damaged Goods** - At Jaycar, we've sent out hundreds of thousands of parcels via post over the last 30+ years and the number of items that have been genuinely lost is less than 0.001%. We've found road and air transportation equally as reliable. However it must be emphasised that our responsibility for the goods ceases when the goods are handed over to the nominated carrier. Risk on the goods passes to you when the goods leave our warehouse. Our order form allows you to elect to have goods insured against loss in transit at your cost otherwise loss of goods in transit is at your own risk. All claims for missing and damaged goods in transit must be lodged with the carrier or local Post Office. If goods have been insured please contact Jaycar Electronics.

**Insurance** - If you wish to insure, it will cost \$1 for every \$100 value or part thereof eg. If your order is for \$145 the insurance will be \$2. This insurance covers goods DAMAGED in transit. (Note: Some items such as solar panels etc. are difficult to ship and have a higher insurance fee of \$7.50 per \$500.) If you do not wish to insure, a statement saying 'Insurance Declined' will appear on the order. If you post an order don't forget to consider insurance. We do not automatically issue insurance unless you specify. If you don't mention insurance you will NOT be insured.

**Out of Stock Items** - items under \$10 are not back ordered. Please re-order once item(s) are in stock.

**STORE LOCATIONS AND HOURS** Store locations and hours are located on the back of this catalogue and were correct at time of print. For new stores and current trading hours visit our website at [www.jaycar.com.au](http://www.jaycar.com.au).

**ANY PROBLEMS** We are proud of our standing with our Customers and are keen to get any feedback, good or bad, to improve our service, products, stores - or any aspect of our business. So please, do not hesitate to contact us.

**JAYCAR AUTHORISED STOCKISTS/WHOLESALE ENQUIRIES** A listing of Jaycar Stockists in your area can be found on the

inside back cover of this catalogue. For new Stockists visit our website at [www.jaycar.com.au](http://www.jaycar.com.au). If you are a reseller of electronics goods you may be able to increase your income by reselling Jaycar products. For more information contact The Stockist Manager on 1300 738 555 or email [stockist@jaycar.com.au](mailto:stockist@jaycar.com.au). For wholesale enquiries, please refer to our main supplier Electus Distribution (Australia: 1300 738 555 & New Zealand: 0800 235 328).

**PRIVACY POLICY** Jaycar Pty Ltd (Jaycar) is committed to protecting the privacy of all individuals. To deliver our commitment to privacy, we will comply with the legislation and regulations of the countries in which we operate. This statement provides a succinct overview of how we handle personal information. Our complete Privacy Policy can be accessed on our website. Both this Condensed Privacy Policy and the complete Privacy Policy were updated March 2014. As an Australian registered company, Jaycar is bound by the current Privacy Act, any amendments and the Australian Privacy Principles (APPs) contained within that Act. All employees and officers of Jaycar are required to comply with the Act and this Privacy Statement. Jaycar has a Privacy Act Procedure which can be obtained by emailing [privacyofficer@jaycar.com.au](mailto:privacyofficer@jaycar.com.au). Information or opinions which are collected, held, used or disclosed by Jaycar about an individual whose identity is apparent, or can reasonably be ascertained, will be protected by the standards outlined in this Statement. To deliver our commitment to privacy, we will:

- Be bound by, and comply with, the APPs under the Act in relation to personal information. Communicate this Privacy Statement to all employees and stakeholders to ensure awareness of their requirement to comply with our privacy standards and to anyone else who asks for it
- Ensure lawful, fair and unobtrusive means are used to collect personal information that is necessary for our business purposes
- Collect sensitive information only with the individual's consent and not disclose any personal information to an unrelated third party, except with the individual's consent or where we are required to do so by law
- Take reasonable steps to destroy or de-identify personal information in a secure manner when we have no further need for it or are required to do so by law
- Ensure only authorised personnel who have agreed to keep personal information confidential have access to the information
- Take reasonable steps to keep personal information up to date, accurate and complete
- Provide individuals access to their personal information on request
- Periodically review and revise this Privacy Statement and related procedures to maintain relevance.

Jaycar recognises and respects the importance of each individual's privacy. This Statement and related procedures ensure all personal information held by Jaycar is handled appropriately and kept confidential.

**What do we use personal information for?** Any personal details you provide will be used for the purpose of dealing with your request, enquiry, transaction or application for employment. This may involve disclosing your personal information to companies within the Jaycar Group, or to service providers who assist us in operating our business. These organisations are required to comply with the principles of this Statement.

**Data Security** We take steps to protect the personal information we hold against loss, unauthorised access, use, modification or disclosure, and against other misuse. When the personal information that we collect is no longer required, we destroy or delete it in a secure manner, in accordance with our documented procedure.

**Your Choices** You can access the personal information that we hold about you, and you can ask us to correct the personal information we hold about you. For more information, see our complete Privacy Policy which located on our website. If you are listed on one or more of our media or network email lists you can opt out at any time. You can unsubscribe by using the 'unsubscribe' link in our emails.

**Our Obligations** Jaycar is bound by the information Privacy Principles in the Privacy Act. For more details see our complete Privacy Policy on our website.

**How to Contact us** For further information contact us on [privacyofficer@jaycar.com.au](mailto:privacyofficer@jaycar.com.au) or alternatively you can write to Privacy Officer, Jaycar Electronics PO Box 7172 Silverwater NSW 1811, Australia.

**LEGAL JURISDICTION** Jaycar operates under the laws and regulations of the State of New South Wales. Therefore any legal disputes will be conducted in courts or tribunals situated in New South Wales and under the laws and regulations of New South Wales, Australia.

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MP-3126	409	MP-3492	354	NA-1022	221			PA-3678	172	PL-0980	325	PP-0402	176	PP-1010	179	PP-2069	415
MP-3144	354	MP-3494	354	NA-1024	221			PA-3679	184	PL-0981	325	PP-0416	176	PP-1012	179	PP-2075	370,415
MP-3145	354	MP-3496	354	NA-1025	222			PA-3680	179	PM-0648	186	PP-0417	176	PP-1013	179	PP-2090	416
MP-3146	60,354	MP-3538	355	NA-1029	222			PA-3682	179	PM-0808	189	PP-0425	252	PP-1014	179	PP-2094	416
MP-3147	61,354	MP-3544	343	NA-1032	47			PA-3684	179	PM-0810	189	PP-0426	176	PP-1016	179	PP-2098	419
MP-3150	358	MP-3547	344	NA-1034	47			PA-3686	179	PM-0812	189	PP-0427	176	PP-1020	179	PP-2099	419
MP-3152	358	MP-3573	506	NA-1040	47			PA-3689	178,471	PM-0828	189	PP-0434	176	PP-1023	179	PP-2110	415
MP-3154	358	MP-3575	506	NA-1060	47			PA-3696	252	PM-0830	189	PP-0435	176	PP-1040	178	PP-2112	415
MP-3155	358	MP-3616	418	NA-1066	221			PA-3700	202	PM-0833	189	PP-0436	176	PP-1052	178	PP-2114	415
MP-3156	358	MP-3618	418	NA-1067	221			PA-3701	202	PM-0847	189	PP-0437	176	PP-1058	178	PP-2116	415
MP-3157	358	MP-3663	347	NA-1070	46,238			PA-3702	202	PM-0848	189	PP-0503	202	PP-1080	178	PP-2120	418
MP-3158	358	MP-3667	347	NA-1410	47			PA-3704	202	PM-0850	189	PP-0504	202	PP-1090	178	PP-2136	419
MP-3159	358	MP-3670	348	NA-1420	386			PA-3706	202	PM-0852	189	PP-0505	202	PP-1091	178	PP-2142	259
MP-3190	358	MP-3671	347,397	NA-1500	223			PA-3707	202	PM-0854	189	PP-0506	202	PP-1100	191	PP-2144	419
MP-3192	358	MP-3672	348	NA-1504	221,457			PA-3711	202,280	PM-0855	189	PP-0507	202	PP-1106	191	PP-2145	260
MP-3195	358	MP-3675	397	NA-1510	223			PA-3713	202,280	PM-0857	189	PP-0508	202	PP-1110	191	PP-2148	415
MP-3197	358	MP-3676	347,397	NA-1518	223			PA-3715	186,280	PM-0859	189	PP-0509	202	PP-1112	191	PP-2149	415
MP-3209	52	MP-3678	397	NA-1519	223			PA-3716	186	PM-0868	189	PP-0510	202	PP-1114	191	PP-2150	415
MP-3241	356	MP-3680	348	NA-1522	223			PA-3717	171	PM-1034	179	PP-0511	202	PP-1116	191	PP-2151	419
MP-3242	355	MP-3682	348	NA-2830	223			PA-3718	171	PM-1441	187,331	PP-0512	202	PP-1118	191	PP-4000	370
MP-3243	355	MP-3684	347	NA-2832	223			PA-3800	179	PM-1442	187,331	PP-0513	202	PP-1122	191	PP-4001	370
MP-3246	355	MP-3686	348	NA-2834	223			PA-3802	179	PM-4015	371	PP-0514	202	PP-1126	191	PP-4003	371
MP-3248	355	MP-3690	348	NC-4258	46			PB-8815	44	PM-4016	371	PP-0515	202	PP-1128	191	PP-4004	371
MP-3249	355	MP-3692	348	NM-2010	137			PB-8816	44	PM-4430	200,414	PP-0531	202	PP-1132	191	PP-4005	371
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MP-3256	358	MP-3739	411	NM-2013	137			PB-8820	44	PM-4436	200,413	PP-0590	188	PP-1140	191	PP-4009	371
MP-3258	358	MP-3750	410	NM-2014	137			PB-8832	44	PM-4438	200,413	PP-0600	184	PP-1142	191	PP-4012	371
MP-3280	355	MP-3752	410	NM-2018	137			PB-8840	44	PM-4439	200,413	PP-0601	185	PP-1148	191	PP-4020	367
MP-3282	355	MP-3754	411	NM-2790	137			PB-8850	44	PM-0100	173	PP-0602	184	PP-1150	191	PP-4023	367
MP-3285	357	MP-3756	410	NM-2800	222			PH-9200	379	PP-0101	173	PP-0604	184	PP-1154	191	PP-4024	367
MP-3286	357	MP-3758	410	NM-2801	222			PH-9202	379	PP-0103	173	PP-0606	184	PP-1164	191	PP-4025	367
MP-3287	357	MP-3760	410	NM-2802	222			PH-9203	379	PP-0104	173	PP-0607	184	PP-1430	186,331	PP-4026	367
MP-3288	357	MP-3800	360	NM-2803	222			PH-9204	379	PP-0114	173	PP-0608	184	PP-1431	186,331	PP-4027	367
MP-3289	357	MP-3802	360	NM-2804	222			PH-9205	380	PP-0116	173	PP-0631	188	PP-1432	186,331	PP-4028	367
MP-3290	357	MP-3840	360	NM-2806	222			PH-9206	379	PP-0130	173	PP-0632	188	PP-1433	186,331	PP-4029	368
MP-3291	357	MP-3842	360	NM-2807	222			PH-9207	380	PP-0131	173	PP-0633	188	PP-1434	187,331	PP-4032	364
MP-3292	357	MP-3844	360	NM-2810	222			PH-9209	379	PP-0132	173	PP-0637	185	PP-1435	187,331	PP-4035	364
MP-3294	357	MP-5205	352	NM-2812	222			PH-9210	379	PP-0134	173	PP-0638	185	PP-1436	187,331	PP-4036	364
MP-3295	357	MP-5207	352	NM-2813	222			PH-9212	379	PP-0135	173	PP-0639	185	PP-1437	187,331	PP-4040	367
MP-3296	357	MP-5224	352	NM-2814	222			PH-9216	379	PP-0136	173	PP-0640	184	PP-1438	187,331	PP-4042	368
MP-3297	357	MS-4000	123	NM-2815	222			PH-9218	379	PP-0138	173	PP-0641	184	PP-1439	187,331	PP-4043	367
MP-3298	357	MS-4001	123	NM-2821	223			PH-9220	379	PP-0150	174	PP-0647	186	PP-1447	187,331	PP-4044	368
MP-3299	357	MS-4003	123,371	NM-2823	223			PH-9221	380	PP-0151	174	PP-0648	185	PP-1453	331	PP-4045	368
MP-3300	357	MS-4007	364	NM-2826	222			PH-9222	379	PP-0152	174	PP-0649	186	PP-1455	331	PP-4046	368
MP-3301	357	MS-4009	346,365	NM-2828	223,475			PH-9226	379	PP-0154	174	PP-0650	186	PP-1910	179	PP-4047	368
MP-3302	357	MS-4013	367	NM-2831	47,206			PH-9230	379	PP-0156	174	PP-0651	186	PP-1912	179	PP-4048	368
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PS-0194	175	PS-0634	188	PS-2003	417	PS-5112	407	PT-4533	197	QC-3654	282	QM-3505	238	QP-5583	259	RC-5347	118
PS-0195	175	PS-0645	185	PS-2004	417	PS-5122	412	PT-4536	198	QC-3667	281	QM-3511	239	QP-5584	259	RC-5348	118
PS-0196	175	PS-0646	185	PS-2008	417	PS-5124	412	PT-4537	196	QC-3669	281	QM-3515	238	QP-5585	263	RC-5352	118
PS-0250	171	PS-0656	186	PS-2009	417	PT-0430	177	PT-4560	199	QC-3762	267	QM-3519	238	QP-5588	263	RC-5354	118
PS-0252	171	PS-0658	186	PS-2011	417	PT-0431	177	PT-4562	199	QC-3763	267	QM-3531	238	QP-5589	259	RC-5356	118
PS-0254	171	PS-0659	186	PS-2012	181	PT-0450	177	PT-4564	199	QC-3764	267	QM-3532	239	QP-6013	256	RC-5360	118
PS-0255	171	PS-0660	186	PS-2013	418	PT-0451	177	PT-4565	199	QC-3765	267	QM-3534	239	QP-6014	256	RC-5364	118
PS-0256	171	PS-0661	186	PS-2014	181	PT-0452	177	PT-4566	199	QC-3837	278	QM-3535	238	QV-3135	269	RC-5380	118
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PS-0258	171	PS-0663	186	PS-2016	418	PT-0454	177	PT-4568	199	QC-3843	278	QM-3539	239	QV-3159	273	RC-5480	118
PS-0259	171	PS-0673	185	PS-2017	418	PT-0455	177	PT-4600	197	QC-3849	277	QM-3549	239	QV-3161	273	RC-5482	118
PS-0260	171	PS-0674	185	PS-2018	181	PT-0457	177	PT-4601	197	QC-3860	277	QM-3552	239	QV-3162	267	RC-5486	118
PS-0261	171	PS-0686	189,337	PS-2019	418	PT-0460	177	PT-4602	197	QC-3880	284	QM-3553	239	QV-3164	269	RC-5490	118
PS-0262	172	PS-0690	189,337	PS-2020	416	PT-0461	177	PT-4603	197	QC-3882	284	QM-3554	239	QV-3166	269	RC-5494	118
PS-0263	172	PS-0712	185	PS-2022	416	PT-0462	177	PT-4607	197	QC-3884	284	QM-3555	239	QV-3845	295	RC-5496	118
PS-0268	172	PS-0740	190	PS-2024	416	PT-0465	177	PT-4608	197	QC-8027	283	QM-3556	239	QV-3847	295	RC-5498	118
PS-0270	171	PS-0742	190	PS-2026	416	PT-0466	177	PT-4609	197	QC-8041	283	QM-3580	282	QV-3858	296	RC-5499	118
PS-0271	171	PS-0749	180	PS-2030	418	PT-0470	176	PT-4610	197	QC-8043	283	QM-3742	298	QV-3865	296	RD-3480	126
PS-0272	171	PS-0753	180	PS-2032	418	PT-0472	176	PT-4614	197	QC-8050	509	QM-3743	298	QV-3870	296	RD-3485	126
PS-0274	171	PS-0761	180	PS-2034	418	PT-0474	176	PT-4615	197	QC-8054	509	QM-3752	502	QV-9005	270	RE-6020	119
PS-0275	171	PS-0763	180	PS-2036	418	PT-3000	177	PT-4618	197	QC-8056	509	QM-3815	498	QV-9006	274	RE-6032	119
PS-0276	171	PS-0764	180	PS-2046	499	PT-3002	177	PT-4621	197	QC-8058	509	QM-3816	498	QV-9007	270,275	RE-6034	120
PS-0277	171	PS-0765	180	PS-2051	440	PT-3004	177	PT-4622	197	QC-8059	509	QM-3817	498	QV-9008	274	RE-6042	119
PS-0278	171	PS-0767	180	PS-2053	440	PT-3006	177	PT-4623	197	QC-8060	509	QM-3819	498	QV-9009	270,275	RE-6044	120
PS-0279	171	PS-0769	180	PS-2056	440	PT-3008	176	PT-4624	197	QC-8062	509	QM-3840	297	QV-9018	280	RE-6045	119
PS-0281	474	PS-0771	180	PS-2073	370,415	PT-3012	177	PT-4625	197	QC-8066	509	QM-3854	297	QV-9020	280	RE-6058	119
PS-0291	474	PS-0773	180	PS-2074	370,415	PT-3020	177	PT-4626	197	QC-8075	509	QM-3856	297	QV-9030	270	RE-6060	119
PS-0295	474	PS-0774	180	PS-2080	116	PT-3021	177	PT-4627	197	QC-8076	509	QM-3857	297	QV-9032	270,275	RE-6062	120
PS-0296	474	PS-0775	180	PS-2082	116	PT-4402	200,413	PT-4628	197	QC-8077	509	QM-3859	297	QV-9034	270,275	RE-6066	119
PS-0297	474	PS-0777	180	PS-2092	416	PT-4403	200,413	PT-4630	198	QC-8078	509	QM-3874	502	QV-9051	271	RE-6070	119
PS-0340	181	PS-0779	180	PS-2096	416	PT-4405	200,413	PT-4631	198	QC-8080	509	QM-6323	256,514	QV-9053	271	RE-6075	119
PS-0348	181	PS-0782	188	PS-2118	349	PT-4406	200,413	PT-4633	197	QC-8081	509	QM-6325	515	QV-9055	271	RE-6078	120
PS-0350	181	PS-0785	202	PS-2120	348	PT-4407	200,413	PT-4637	196	QC-8082	509	QM-7201	518	QV-9057	271	RE-6079	119
PS-0352	181	PS-0794	180	PS-2122	348	PT-4420	200,412	PT-4640	195	QC-8086	509	QM-7209	256,514	QV-9058	271,275	RE-6080	119
PS-0354	181	PS-0795	180	PS-2126	417	PT-4422	200,412	PT-4641	195	QC-8088	509	QM-7215	255	QV-9059	271,275	RE-6090	119
PS-0355	181	PS-0796	180	PS-2128	417	PT-4424	200,412	PT-4651	195	QC-8090	509	QM-7216	256	QV-9060	266	RE-6092	119
PS-0358	181	PS-0797	180	PS-2806	416	PT-4425	200,412	PT-4653	195	QC-8096	509	QM-7218	255	QV-9062	266	RE-6095	119
PS-0359	181	PS-0798	180	PS-2808	416	PT-4427	200,412	PT-4660	178	QC-8098	509	QM-7221	255	QV-9063	266	RE-6100	119
PS-0368	181	PS-0799	180	PS-2810	416	PT-4428	201,414	PT-4700	197	QC-8099	509	QM-7226	255	QV-9065	266	RE-6110	119
PS-0372	181	PS-0804	189	PS-4002	371	PT-4429	201,414	PT-4701	197	QC-8631	283	QM-7234	262,517	QV-9066	266	RE-6122	119
PS-0376	181	PS-0805	189	PS-4004	370	PT-4431	201,414	PT-4702	197	QC-8637	269,274	QM-7258	262	QV-9067	266	RE-6125	120
PS-0377	181	PS-0806	189	PS-4006	371	PT-4432	201,414	PT-4703	197	QC-8639	269,274	QM-7259	262	QV-9068	266	RE-6130	119
PS-0406	176	PS-0824	189	PS-4008	370	PT-4433	197	PT-4707	197	QC-8651	283	QM-7264	262	QV-9070	272	RE-6140	119
PS-0408	176	PS-0825	189	PS-4013	371	PT-4434	200,413	PT-4708	197	QC-8653	274	QM-7304	517	QV-9072	272	RE-6150	119
PS-0420	176	PS-0832	189	PS-4046	369	PT-4436	200,413	PT-4709	197	QC-8654	274	QM-7305	517	QV-9074	272	RE-6156	120
PS-0421	176	PS-0844	189	PS-4051	369	PT-4438	201,414	PT-4710	197	QC-8660	283	QM-7308	517	QV-9076	272,277	RE-6157	119
PS-0422	176	PS-0845	189	PS-4055	369	PT-4439	201,414	PT-4714	197	QC-8663	267	QM-7309	517	QV-9078	272,277	RE-6158	119
PS-0423	176	PS-0846	189	PS-4057	369	PT-4440	201,412	PT-4715	197	QC-8672	275	QM-7310	514	QV-9080	272	RE-6160	119
PS-0424	176	PS-0864	189	PS-4060	369	PT-4442	201,412	PT-4717	197	QC-8674	275	QM-7312	514	QV-9082	272,277	RE-6180	119
PS-0441	172	PS-0916	188	PS-4062	369	PT-4444	201,412	PT-4718	197	QC-8676	276	QM-7314	514	QV-9084	272,277	RE-6188	119
PS-0442	172	PS-0920	188	PS-4063	369	PT-4446	201,412	PT-4721	197	QC-8678	276	QM-7316	514	QV-9090	284	RE-6190	119
PS-0443	172	PS-0922	188	PS-4064	187	PT-4447	201,412	PT-4722	197	QC-8680	276	QM-8046	298	QV-9800	266	RE-6194	119
PS-0445	172	PS-0924	188	PS-4065	369	PT-4448	201,412	PT-4723	197	QC-8685	269,274	QM-8047	298	QV-9802	266	RE-6195	119
PS-0446	172	PS-0926	188	PS-4066	369	PT-4449	201,412	PT-4724	197	QC-8687	269,274	QP-2002	367	QV-9804	266	RE-6210	119
PS-0480	474	PS-0928	188	PS-4069	369	PT-4450	203	PT-4725	197	QC-8702	261	QP-2004	367			RE-6220	119
PS-0489	172	PS-0930	188	PS-4071	346,369	PT-4451	417	PT-4726	197	QC-8710	261	QP-2212	259	<b>R:</b>		RE-6230	119
PS-0490	172	PS-0942	188	PS-4075	370	PT-4452	203	PT-4727	197	QC-8712	261	QP-2216	260	RC-5300	118	RE-6236	119
PS-0491	172	PS-0944	188	PS-4077	369	PT-4453	191	PT-4728	197	QM-1020	248	QP-2220	259	RC-5301	118	RE-6238	119
PS-0492	172	PS-0946	188	PS-4092	370	PT-4454	203	PT-4737	196	QM-1282	251	QP-2252	375	RC-5302	118	RE-6240	119
PS-0493	172	PS-0984	191	PS-4094	370	PT-4456	203	PT-4800	198	QM-1283	251	QP-2253	375	RC-5303	118	RE-6241	119
PS-0494	172	PS-0985	191	PS-4095	370	PT-4458	203	PT-4802	198	QM-1284	251	QP-2258	260	RC-5304	118	RE-6243	119
PS-0495	172	PS-0986	191	PS-4097	370	PT-4460	201,414	PT-4807	198	QM-1321	244	QP-2260	260,375	RC-5305	118	RE-6244	119
PS-0496	172	PS-0987	191	PS-4100	372	PT-4462	414	PT-4809	198	QM-1323	244	QP-2261	387	RC-5306	118	RE-6245	119
PS-0497	172	PS-0988	191	PS-4102	372	PT-4463	414	PT-4810	198	QM-1446	245	QP-2263	387	RC-5307	118	RE-6250	118
PS-0498	172	PS-0989	191	PS-4103	372	PT-4464	201,414	PT-4814	198	QM-1448	260	QP-2268	260	RC-5308	118	RE-6300	120
PS-0499	172	PS-0990	191	PS-4104	372	PT-4466	201,414	PT-4818	198	QM-1493	249	QP-2285	260	RC-5309	118	RE-6302	120
PS-0516	202	PS-1001	203	PS-4105	372	PT-4470	201,414	PT-4822	198	QM-1494	259	QP-2287	260	RC-5310	118	RE-6304	120
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RG-5075	117	RN-3417	123	RR-0535	127	RR-0633	127	RR-2814	127	RT-4018	126	RY-6954	117	SB-2400	383	SF-1980	408
RG-5080	117	RN-3430	115	RR-0536	127	RR-0634	127	RR-2816	127	RT-4020	126	RY-6955	117	SB-2401	383	SF-1982	408
RG-5085	117	RN-3432	115	RR-0537	127	RR-0635	127	RR-2818	127	RT-4022	126	RY-6956	117	SB-2402	383	SF-1984	408
RG-5090	117	RN-3434	115	RR-0538	127	RR-0636	127	RR-2820	127	RT-4024	126	RY-6957	117	SB-2404	383	SF-1990	147
RG-5095	117	RN-3436	115	RR-0539	127	RR-0637	127	RR-2822	127	RT-4026	126	RY-6958	117	SB-2411	375,378	SF-1992	147
RG-5100	117	RN-3438	115	RR-0540	127	RR-0638	127	RR-2824	127	RT-4028	126	RZ-6620	118	SB-2413	382	SF-1995	147
RG-5105	117	RN-3440	115	RR-0541	127	RR-0639	127	RR-2826	127	RT-4029	126	RZ-6622	118	SB-2415	382	SF-1997	147
RG-5110	117	RN-3442	115	RR-0542	127	RR-0640	127	RR-2828	127	RT-4304	126	RZ-6624	118	SB-2416	382	SF-1999	147
RG-5115	117	RN-3444	115	RR-0543	127	RR-0641	127	RR-2830	127	RT-4306	126	RZ-6626	118	SB-2417	382	SF-2100	144
RG-5120	117	RN-3446	115	RR-0544	127	RR-0642	127	RR-2832	127	RT-4308	126	RZ-6627	118	SB-2418	382	SF-2101	144
RG-5125	117	RN-3460	149	RR-0545	127	RR-0643	127	RR-2834	127	RT-4310	126	RZ-6628	118	SB-2420	382	SF-2102	144
RG-5130	117	RN-3462	149	RR-0546	127	RR-0644	127	RR-2836	127	RT-4312	126	RZ-6630	118	SB-2421	382	SF-2103	144
RG-5135	117	RN-3464	149	RR-0547	127	RR-0660	127	RR-2838	127	RT-4314	126	RZ-6632	118	SB-2422	382	SF-2104	143
RG-5140	117	RN-3466	149	RR-0548	127	RR-0680	126	RR-2840	127	RT-4316	126	RZ-6636	118	SB-2423	382	SF-2105	143
RG-5145	117	RN-3468	149	RR-0549	127	RR-1500	127	RR-2842	127	RT-4318	126	RZ-6640	118	SB-2424	382	SF-2106	143
RG-5150	117	RN-3470	149	RR-0550	127	RR-1502	127	RR-2844	127	RT-4320	126	RZ-6642	118	SB-2425	382	SF-2107	143
RG-5153	117	RP-3500	125,209	RR-0551	127	RR-1504	127	RR-2846	127	RT-4324	126	RZ-6645	118	SB-2426	382	SF-2108	143
RG-5165	117	RP-3502	125	RR-0552	127	RR-1506	127	RR-2848	127	RT-4350	126	RZ-6648	118	SB-2427	382	SF-2109	143
RG-5166	117	RP-3504	125	RR-0553	127	RR-1508	127	RR-2850	127	RT-4352	126	RZ-6650	118	SB-2467	376	SF-2110	143
RG-5168	117	RP-3508	125	RR-0554	127	RR-1510	127	RR-2854	127	RT-4354	126	RZ-6655	118	SB-2468	377	SF-2112	143
RG-5169	117	RP-3510	125	RR-0555	127	RR-1512	127	RR-2858	127	RT-4356	126	RZ-6657	118	SB-2480	384	SF-2114	143
RG-5170	117	RP-3514	125	RR-0556	127	RR-1514	127	RR-2860	127	RT-4358	126	RZ-6658	118	SB-2482	384	SF-2115	144
RG-5172	117	RP-3516	125	RR-0557	127	RR-1516	127	RR-2862	127	RT-4360	126	RZ-6665	118	SB-2484	384	SF-2116	144
RG-5175	117	RP-3518	125	RR-0558	127	RR-1518	127	RR-2864	127	RT-4362	126	RZ-6670	118	SB-2485	384	SF-2117	144
RG-5180	117	RP-3520	125	RR-0559	127	RR-1520	127	RR-2868	127	RT-4364	126	<b>S:</b>					
RG-5199	118	RP-3522	125	RR-0560	127	RR-1522	127	RR-2870	127	RT-4366	126						
RG-5201	117	RP-3524	125	RR-0561	127	RR-1524	127	RR-3206	127	RT-4368	126	SB-1611	376,377	SB-2487	384	SF-2119	144
RG-5202	117	RP-3604	125	RR-0562	127	RR-1650	127	RR-3208	127	RT-4370	126	SB-1617	376	SB-2489	384	SF-2120	144
RG-5203	117	RP-3608	125	RR-0563	127	RR-1652	127	RR-3214	127	RT-4372	126	SB-1622	381	SB-2490	384	SF-2121	144
RG-5204	117	RP-3610	125	RR-0564	127	RR-1654	127	RR-3220	127	RT-4600	126	SB-1634	377	SB-2495	384	SF-2122	144
RG-5205	117	RP-3614	125	RR-0565	127	RR-1656	127	RR-3230	127	RT-4602	126	SB-1645	377	SB-2496	384	SF-2124	144
RG-5210	117	RP-3616	125	RR-0566	127	RR-1658	127	RR-3232	127	RT-4604	126	SB-1646	377	SB-2497	384	SF-2126	146
RG-5222	117	RP-3618	125	RR-0567	127	RR-1660	127	RR-3234	127	RT-4608	126	SB-1648	377	SB-2498	384	SF-2127	146
RG-5230	117	RP-3620	125	RR-0568	127	RR-1662	127	RR-3236	127	RT-4610	126	SB-1651	377	SB-2501	381	SF-2128	146
RG-5232	117	RP-3622	125	RR-0569	127	RR-1664	127	RR-3238	127	RT-4612	126	SB-1653	377	SB-2502	381	SF-2130	146
RG-5234	117	RP-3624	125	RR-0570	127	RR-1666	127	RR-3240	127	RT-4614	126	SB-1654	329,377	SB-2504	381	SF-2132	146
RG-5236	117	RP-3706	125	RR-0571	127	RR-1668	127	RR-3242	127	RT-4616	126	SB-1654	385	SB-2508	381	SF-2134	146
RG-5238	117	RP-3708	125	RR-0572	127	RR-1670	127	RR-3244	127	RT-4618	126	SB-1680	385	SB-2510	381	SF-2136	146
RG-5240	117	RP-3710	125	RR-0573	127	RR-1672	127	RR-3246	127	RT-4620	126	SB-1682	385	SB-2512	381	SF-2137	146
RG-5247	117	RP-3712	125	RR-0574	127	RR-1680	126	RR-3248	127	RT-4622	126	SB-1683	385	SB-2513	381	SF-2138	146
RG-5248	117	RP-3756	125	RR-0575	127	RR-1697	126	RR-3250	127	RT-4624	126	SB-1684	385	SB-2514	381	SF-2139	146
RL-6402	120	RP-3760	125	RR-0576	127	RR-2000	126	RR-3252	127	RT-4640	126	SB-1686	385	SB-2516	381	SF-2141	146
RL-6406	120	RP-3762	125	RR-0577	127	RR-2502	127	RR-3254	127	RT-4642	126	SB-1695	385	SB-2520	381	SF-2142	146
RL-6408	120	RP-3975	125	RR-0578	127	RR-2504	127	RR-3256	127	RT-4644	126	SB-1698	385	SB-2522	381	SF-2143	146
RL-6410	120	RP-7500	125,209	RR-0579	127	RR-2506	127	RR-3258	127	RT-4646	126	SB-1699	385	SB-2523	381	SF-2146	146
RL-6412	120	RP-7504	125	RR-0580	127	RR-2508	127	RR-3260	127	RT-4648	126	SB-1706	376	SB-2524	381	SF-2148	143
RL-6414	120	RP-7508	125	RR-0581	127	RR-2510	127	RR-3262	127	RT-4650	126	SB-1708	376	SB-2525	381	SF-2152	143
RL-6418	120	RP-7510	125	RR-0582	127	RR-2512	127	RR-3264	127	RT-4652	126	SB-1723	376	SB-2526	381	SF-2153	143
RL-6420	120	RP-7516	125	RR-0583	127	RR-2514	127	RR-3266	127	RT-4654	126	SB-1724	376	SB-2527	381	SF-2154	143
RL-6422	120	RP-7518	125	RR-0584	127	RR-2516	127	RR-3268	127	RT-4656	126	SB-1728	376	SB-2529	381	SF-2155	143
RL-6424	120	RP-7524	125	RR-0585	127	RR-2518	127	RR-3270	127	RT-4658	126	SB-1734	376	SB-2530	381	SF-2156	143
RL-6428	120	RP-7604	125	RR-0586	127	RR-2520	127	RR-3272	127	RU-6600	119	SB-1736	376	SB-2532	381	SF-2157	143
RL-6430	120	RP-7610	125	RR-0587	127	RR-2522	127	RR-3274	127	RU-6602	119	SB-1737	376	SB-2534	381	SF-2158	143
RL-6432	120	RP-7616	125	RR-0588	127	RR-2524	127	RR-3276	127	RU-6604	119	SB-1738	376	SB-2536	381	SF-2159	143
RL-6434	120	RP-7708	125	RR-0589	127	RR-2526	127	RR-3278	127	RU-6606	119	SB-1739	376	SB-2542	381	SF-2160	143
RL-6436	120	RP-7712	125	RR-0590	127	RR-2528	127	RR-3280	127	RU-6608	119	SB-1744	376	SB-2543	381	SF-2161	143
RM-7010	117	RP-7756	125	RR-0591	127	RR-2530	127	RR-3282	127	RU-6700	119	SB-1751	377	SB-2544	381	SF-2162	143
RM-7012	117	RP-8504	125	RR-0592	127	RR-2532	127	RR-3284	127	RU-6705	119	SB-1756	377	SB-2545	381	SF-2163	143
RM-7015	117	RP-8510	125	RR-0593	127	RR-2534	127	RR-3286	127	RU-6708	120	SB-1757	377	SB-2547	381	SF-2164	143
RM-7022	117	RP-8516	125	RR-0594	127	RR-2536	127	RR-3288	127	RU-6709	120	SB-1760	381	SB-2548	381	SF-2165	143
RM-7027	117	RP-8518	125	RR-0595	127	RR-2538	127	RR-3290	127	RU-6710	120	SB-1762	381	SB-2549	3		



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SF-2228	144	SK-0928	150	SL-3200	110	SP-0613	158	ST-0578	156	SY-4029	138	SZ-2098	146	TH-1815	230	TL-4072	70
SF-2230	144	SK-0929	150	SL-3202	110	SP-0614	158	ST-0579	156	SY-4030	137			TH-1816	235	TL-4077	71
SF-2231	144	SK-0955	152	SL-3204	110	SP-0620	158	ST-0580	156	SY-4032	137			TH-1817	230	TL-4079	71
SF-2232	144	SK-0960	152	SL-3206	110	SP-0621	158	ST-0581	156	SY-4036	137			TH-1818	235	TL-4104	71
SF-2233	144	SK-0962	152	SL-3208	110	SP-0622	158	ST-0582	156	SY-4038	137	TD-2000	229	TH-1820	230,337	TL-4106	71
SF-2234	144	SK-0964	152	SL-3210	110	SP-0656	153	ST-0583	156	SY-4040	140	TD-2010	234	TH-1824	230	TL-4107	71
SF-2240	144	SK-0966	152	SL-3211	110	SP-0657	153	ST-0584	156	SY-4041	140	TD-2012	232	TH-1827	230	TL-4109	71
SF-2242	144	SK-0967	152	SL-3216	110	SP-0662	28,153	ST-0585	156	SY-4044	140	TD-2021	233	TH-1828	228	TL-4110	70
SF-2244	387	SK-0968	151	SL-3217	110	SP-0664	28,153	ST-0586	156	SY-4045	141	TD-2022	226	TH-1829	228	TL-4111	71
SF-2245	387	SK-0969	151	SL-3238	286	SP-0665	28,153	ST-0587	156	SY-4046	141	TD-2023	226	TH-1831	228	TL-4112	70
SF-2247	387	SK-0970	151	SL-3239	286,428	SP-0666	28,153	ST-0590	156	SY-4047	141	TD-2026	226	TH-1832	228	TL-4114	70
SF-2249	387	SK-0972	151	SL-3401	493	SP-0669	28,153	ST-0592	156	SY-4050	138	TD-2027	234	TH-1833	228	TL-4116	70
SF-2250	387	SK-0975	150	SL-3402	493	SP-0700	154	ST-0594	155	SY-4051	138	TD-2031	227	TH-1834	228	TL-4117	71
SF-2252	148	SK-0976	151	SL-3403	424	SP-0702	154	ST-3102	516	SY-4052	138	TD-2032	233	TH-1838	232	TL-4118	70
SF-2254	148	SK-0978	151	SL-3410	493	SP-0704	153	ST-3130	435	SY-4053	138	TD-2035	233	TH-1841	230	TL-4119	71
SF-2258	148	SK-0979	151	SL-3412	437	SP-0706	153	ST-3133	433	SY-4058	137	TD-2038	233	TH-1842	235	TL-4120	70
SF-2259	148	SK-0980	151	SL-3414	437	SP-0710	154	ST-3145	435	SY-4059	137	TD-2042	226	TH-1843	230	TL-4121	71
SF-2260	148	SK-0981	151	SL-3448	426	SP-0711	154	ST-3146	366	SY-4060	138	TD-2049	226,259	TH-1845	236	TL-4122	70
SF-2261	148	SK-0982	151	SL-3450	493	SP-0714	154	ST-3158	435	SY-4061	137	TD-2052	237	TH-1846	228	TL-4124	70
SF-2265	148	SK-0983	151	SL-3452	426	SP-0716	153	ST-3181	366	SY-4062	138	TD-2055	226	TH-1847	228	TL-4126	70
SF-2266	148	SK-0984	150	SL-3454	493	SP-0717	153	ST-3193	426	SY-4064	140	TD-2060	226	TH-1848	198,228	TL-4128	70
SF-2269	144,251	SK-0987	151	SL-3459	426	SP-0718	153	ST-3209	434	SY-4065	140	TD-2062	226	TH-1849	228	TL-4130	71
SF-2272	144,251	SK-0991	151	SL-3460	426	SP-0720	158	ST-3210	434	SY-4066	138	TD-2064	226	TH-1850	219	TL-4132	71
SF-2274	144,251	SK-0994	152	SL-3461	426	SP-0721	158	ST-3211	434	SY-4067	138	TD-2065	226	TH-1851	218	TL-4134	71
SF-2276	144,251	SK-0995	151	SL-3469	492	SP-0722	158	ST-3213	434	SY-4068	141	TD-2069	233	TH-1856	219	TL-4136	71
SF-2277	144,251	SK-0997	151	SL-3474	426	SP-0723	158	ST-3214	433	SY-4069	141	TD-2070	233	TH-1857	219	TL-4138	71
SF-2278	144,251	SK-0998	151,354	SL-3476	426	SP-0724	158	ST-3215	433	SY-4070	141	TD-2081	262	TH-1860	219	TL-4140	70
SF-2279	144,251	SK-0999	151	SL-3478	426	SP-0732	154	ST-3218	430	SY-4072	138	TD-2082	262	TH-1861	219	TL-4142	70
SF-2281	148	SK-2216	420	SL-3480	426	SP-0735	152	ST-3230	433	SY-4073	141	TD-2089	234	TH-1862	219	TL-4152	70
SF-2283	148	SK-2300	420	SL-3484	492	SP-0741	153	ST-3240	433	SY-4074	141	TD-2105	233	TH-1863	219	TL-4154	70
SF-2284	148	SK-2302	420	SL-3490	437	SP-0743	153	ST-3250	430	SY-4076	141	TD-2106	233	TH-1864	235	TL-4155	70
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SF-2293	147	SK-2441	424	SL-3496	437	SP-0747	153	ST-3271	430	SY-4078	141	TD-2114	233	TH-1868	235	TL-4200	75
SF-2295	147	SK-2442	424	SL-3500	428	SP-0748	154	ST-3273	430	SY-4080	139	TD-2115	227	TH-1872	225	TL-4202	75
SF-2297	147	SK-2443	424	SL-3501	427	SP-0749	153	ST-3277	434	SY-4081	437	TD-2116	227	TH-1873	236	TL-4210	67
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SF-2320	147	SK-2448	424	SL-3507	427	SP-0756	153	ST-3298	434	SY-4086	139	TD-2120	235	TH-1885	224	TL-4213	67
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SF-2324	147	SK-2613	107	SL-3510	428	SP-0759	153	ST-3316	432	SY-4090	139	TD-2128	236	TH-1891	224	TL-4220	67
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SF-2334	147	SK-2627	107	SL-3929	339,437	SP-0782	152	ST-3432	431	SZ-1903	148	TD-2234	226	TH-1917	236	TS-1105	211
SF-2335	147	SK-2630	107	SL-3931	436	SP-0786	154	ST-3446	491	SZ-1906	148	TD-2235	226	TH-1922	224	TS-1111	211
SF-2336	147	SK-2632	107	SL-3932	436	SP-0787	153	ST-3449	431	SZ-1907	148	TD-2236	226	TH-1923	237	TS-1112	211
SF-2337	147	SK-2633	107	SL-3933	424	SP-0788	153	ST-3456	431	SZ-1926	149	TD-2237	226	TH-1925	507	TS-1113	213
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SF-4108	147	SK-2659	110	SM-1013	159	SR-1230	159	ST-3600	492	SZ-2016	142	TH-1606	213	TH-1982	225	TS-1314	212
SF-4158	408	SK-2661	438	SM-1015	159	SR-1250	159	ST-3602	492	SZ-2018	142	TH-1610	213	TH-1985	225	TS-1315	212
SF-5020	146	SK-2670	110	SM-1017	159	SR-1254	159	ST-3800	149	SZ-2019	142	TH-1620	204	TH-1986	225	TS-1318	212
SF-5022	146	SK-2671	110	SM-1018	159	SR-1256	159	ST-3804	149	SZ-2020	143	TH-1632	213	TH-1987	220	TS-1320	212
SF-5026	146	SK-2673	110	SM-1020	159	SS-0812	160	ST-3808	149	SZ-2021	143	TH-1730	415	TH-1989	220	TS-1321	212
SF-5028	146	SK-2674	110	SM-1024	159	SS-0821	160	ST-3810	149	SZ-2022	142	TH-1732	415	TH-1991	231	TS-1322	

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TS-1508	220	WB-1502	170	WC-7753	321	WH-5532	204	WQ-7217	473	WV-7360	476	XC-4350	42	XC-4588	41	XC-5209	445
TS-1510	220	WB-1504	170	WC-7754	321	WH-5533	204	WQ-7220	473	WV-7361	476	XC-4364	42	XC-4590	41	XC-5211	325
TS-1512	220	WB-1506	170	WC-7755	321	WH-5534	204	WQ-7221	473	WV-7362	476	XC-4366	42	XC-4592	31	XC-5213	445
TS-1514	218	WB-1508	170	WC-7756	346	WH-5535	204	WQ-7222	473	WV-7363	476	XC-4380	30	XC-4593	21	XC-5227	444
TS-1515	218	WB-1510	170	WC-7757	320,345	WH-5536	204	WQ-7223	473	WV-7364	476	XC-4382	22	XC-4594	38	XC-5228	445
TS-1516	218	WB-1530	170	WC-7758	320,345	WH-5537	204	WQ-7224	473	WV-7365	472,476	XC-4384	29	XC-4595	22	XC-5229	445
TS-1517	218	WB-1540	170	WC-7759	320,345	WH-5540	204	WQ-7225	473	WV-7366	472,476	XC-4386	35	XC-4596	24,35	XC-5231	448
TS-1518	218	WB-1554	170	WC-7762	321	WH-5541	204	WQ-7226	473	WV-7367	472,476	XC-4388	23	XC-4602	28	XC-5409	516
TS-1519	218	WB-1556	170	WC-7766	344	WH-5542	204	WQ-7227	473	WV-7368	472,476	XC-4392	23	XC-4603	36	XC-5616	324
TS-1520	218	WB-1560	193	WC-7770	320,345	WH-5543	204	WQ-7228	473	WV-7369	472,476	XC-4394	23	XC-4604	36	XC-5617	324
TS-1532	214	WB-1562	193	WC-7772	320,345	WH-5544	204	WQ-7230	473	WV-7390	472	XC-4410	19	XC-4605	22	XC-5618	324
TS-1535	214	WB-1565	193	WC-7774	320,345	WH-5545	204	WQ-7237	473	WV-7392	472	XC-4412	23	XC-4606	44	XC-5619	324
TS-1536	214	WB-1568	193	WC-7792	320,345	WH-5546	204	WQ-7250	473	WV-7394	472	XC-4414	20	XC-4607	31	XC-5625	324
TS-1540	215	WB-1575	183	WC-7796	320,345	WH-5547	204	WQ-7257	314	WV-7396	472	XC-4416	37	XC-4609	25	XC-5626	324
TS-1542	215	WB-1578	183	WC-7800	474	WH-5550	204	WQ-7258	314	WV-7450	472,476	XC-4418	26	XC-4610	26	XC-5628	324
TS-1554	215	WB-1590	183	WC-7802	474	WH-5551	204	WQ-7259	473	WV-7452	472,476	XC-4419	26	XC-4611	34	XC-5630	444,518
TS-1555	215	WB-1591	183	WC-7804	474	WH-5552	204	WQ-7275	280	WV-7454	472,476	XC-4420	19	XC-4613	38	XC-5680	325
TS-1556	215	WB-1596	183	WC-7824	310	WH-5553	204	WQ-7276	280	WV-7456	472,476	XC-4422	28	XC-4614	23	XC-5682	282
TS-1557	215	WB-1598	183	WC-7900	320,345	WH-5554	204	WQ-7277	280	WV-7905	461	XC-4424	21	XC-4616	31	XC-5700	346
TS-1564	216	WB-1620	182	WC-7902	320,345	WH-5555	204	WQ-7278	280	WV-7913	461	XC-4426	24	XC-4617	31	XC-6000	445
TS-1565	216	WB-1622	182	WC-7904	320,345	WH-5556	204	WQ-7279	280	WV-7915	461	XC-4427	24	XC-4618	27	XC-6001	445
TS-1566	216	WB-1700	183	WC-7906	320,345	WH-5557	204	WQ-7280	280	WV-7916	461	XC-4428	33	XC-4620	20	XC-9000	15
TS-1567	216	WB-1702	169	WC-7909	320,345	WH-5560	204	WQ-7281	280	WV-7917	461	XC-4430	20	XC-4621	31	XC-9002	16
TS-1576	217,218	WB-1703	169	WC-7910	320,345	WH-5561	204	WQ-7283	280	WV-7918	461	XC-4434	33	XC-4622	31	XC-9004	16
TS-1577	217,218	WB-1704	169	WC-7912	320,345	WH-5562	204	WQ-7284	280	WV-4013	194	XC-4438	21	XC-4623	31	XC-9006	16
TS-1578	217,218	WB-1706	169	WC-7920	320,345	WH-5563	204	WQ-7285	280	WV-4014	194	XC-4440	26	XC-4624	29	XC-9010	15
TS-1580	218	WB-1708	169	WC-7930	322,444	WH-5564	204	WQ-7287	280	WV-4016	194	XC-4442	34	XC-4625	29	XC-9012	15
TS-1581	218	WB-1709	169	WC-7950	315	WH-5565	204	WQ-7288	202	WV-4018	194	XC-4444	34	XC-4627	38	XC-9014	75
TS-1584	218	WB-1710	169	WH-3000	194	WH-5566	204	WQ-7289	202	WV-4020	194	XC-4446	35	XC-4629	29	XC-9020	16
TS-1585	218	WB-1712	169	WH-3001	194	WH-5567	204	WQ-7290	471	WV-4022	194	XC-4448	21	XC-4630	29,28	XC-9022	17
TS-1586	218	WB-1713	169	WH-3002	194	WH-5570	204	WQ-7291	471	WV-4024	194	XC-4450	32	XC-4639	317	XC-9024	17
TS-1587	218	WB-1732	169	WH-3003	194	WH-5571	204	WQ-7292	471	WV-4030	194	XC-4454	29	XC-4667	325	XC-9026	17
TS-1588	218	WB-1740	169	WH-3004	194	WH-5572	204	WQ-7293	474	WV-4032	194	XC-4456	23	XC-4669	325	XC-9030	15
TS-1589	218	WB-1754	169	WH-3005	194	WH-5573	204	WQ-7294	474	WV-4040	194	XC-4458	27	XC-4672	326	XC-9040	15
TS-1590	218	WB-1762	169	WH-3006	194	WH-5574	204	WQ-7295	474	WV-4100	47	XC-4464	38	XC-4681	325	XC-9042	16
TS-1610	216	WB-2001	182	WH-3007	194	WH-5575	204	WQ-7296	471	WV-4344	194	XC-4466	33	XC-4686	325	XC-9044	16
TS-1611	216	WB-2002	182	WH-3009	194	WH-5576	204	WQ-7297	474	WV-4345	194	XC-4468	33	XC-4697	326	XC-9046	28
TS-1620	216	WB-2004	182	WH-3010	194	WH-5577	204	WQ-7301	474	WV-4346	194	XC-4472	26	XC-4698	326	XM-5096	319
TS-1622	214,215	WB-2005	182	WH-3011	194	WH-5582	204	WQ-7302	474			XC-4474	34	XC-4707	324	XM-5099	318
TS-1640	217	WB-2009	182	WH-3012	194	WH-5584	205	WQ-7303	474	<b>X:</b>		XC-4478	34	XC-4718	324	XM-5241	318
TS-1641	217	WB-2010	182,337	WH-3013	194	WH-5585	205	WQ-7401	461	XB-9005	191	XC-4482	37	XC-4731	324	XM-5243	318
TS-1642	217	WB-2012	182	WH-3014	194	WH-5587	205	WQ-7406	462	XB-9008	118	XC-4486	25	XC-4732	324	XM-5248	318
TS-1643	217	WB-2014	182	WH-3015	194	WH-5588	205	WQ-7407	462	XC-0100	96	XC-4488	26	XC-4733	324		
TS-1644	217	WB-2015	182	WH-3016	194	WH-5590	204	WQ-7412	462	XC-0103	515	XC-4490	33	XC-4734	324		
TS-1645	217	WB-2017	183	WH-3017	194	WH-5591	204	WQ-7422	462	XC-0117	259	XC-4492	26	XC-4738	324	YG-2600	50
TS-1651	214	WB-2018	183	WH-3025	194	WH-5592	204	WQ-7424	317,466	XC-0225	515	XC-4494	36	XC-4744	324	YG-2602	50
TS-1652	214	WB-2020	183	WH-3032	44	WH-5593	204	WQ-7427	315	XC-0230	515	XC-4496	34	XC-4745	324	YG-2630	51
TS-1660	213	WB-2022	183	WH-3035	192	WH-5594	204	WQ-7435	461	XC-0270	518	XC-4498	22,31	XC-4746	324	YG-2632	51
TS-1667	213	WB-2023	183	WH-3037	192	WH-5595	204	WQ-7436	461	XC-0321	514	XC-4499	31	XC-4747	324	YG-2730	48
		WB-2030	183	WH-3040	194	WH-5596	204	WQ-7437	461	XC-0322	514	XC-4502	25	XC-4748	324	YG-2732	49
		WC-6010	251	WH-3041	194	WH-5597	204	WQ-7438	461	XC-0324	514	XC-4506	32	XC-4749	323	YG-2734	49
WA-7000	470	WC-6018	51	WH-3042	194	WH-5610	204	WQ-7439	461	XC-0331	513	XC-4508	24	XC-4751	323	YG-2736	51
WA-7004	470	WC-6020	251	WH-3045	192	WH-5612	204	WQ-7440	315	XC-0343	511	XC-4512	25	XC-4757	323	YG-2740	50
WA-7005	470	WC-6024	45	WH-3046	192	WH-5620	204	WQ-7442	315	XC-0346	511	XC-4514	25	XC-4782	323	YG-2741	50
WA-7006	470	WC-6026	45	WH-3047	192	WH-5622	204	WQ-7443	315	XC-0366	510	XC-4516	21	XC-4834	313	YG-2742	50
WA-7007	470	WC-6027	45	WH-3049	193	WH-5624	204	WQ-7444	315	XC-0370	512	XC-4518	35	XC-4839	321	YG-2744	51
WA-7008	470	WC-6028	45	WH-3050	194	WH-5626	204	WQ-7450	315	XC-0387	516	XC-4520	36	XC-4847	313	YG-2784	51
WA-7009	470	WC-7500	314	WH-3052	194	WH-5630	205	WQ-7452	315	XC-0389	516	XC-4522	24	XC-4867	449	YG-2869	50
WA-7010	470	WC-7511	314	WH-3053	193	WH-5632	205	WQ-7454	315	XC-0392	518	XC-4524	34	XC-4871	317	YG-2891	96
WA-7011	444,470	WC-7513	314	WH-3054	192	WH-5634	205	WQ-7900	461	XC-0399	510	XC-4532	22,31	XC-4884	321	YG-2900	27
WA-7014	470	WC-7516	314	WH-3055	192	WH-5636	205	WQ-7902	461	XC-0400	518	XC-4536	32,35	XC-4905	319	YH-5408	238
WA-7015	470	WC-7534	314	WH-3056	192	WH-5640	204	WQ-7904	461	XC-0422	512	XC-4540	36	XC-4906	316	YH-5412	238
WA-7016	470	WC-7535	314	WH-3057	193	WH-5641	204	WQ-7905	461	XC-0424	513	XC-4542	32	XC-4926	323	YM-2706	48
WA-7017	470	WC-7582	314	WH-3060	192	WH-5642	204	WQ-7906	461	XC-0430	513	XC-4544	21	XC-4927	313	YM-2707	48
WA-7018	470	WC-7583	314	WH-3062	192	WH-5643	204	WQ-7911	462	XC-3700	36	XC-4545	21	XC-4929	448	YM-2712	48
WA-7020	322,473	WC-7584	314	WH-3063	193	WH-5644	204	WS-5502	205	XC-3702	36	XC-4546	30	XC-4934	319,489	YM-2716	48
WA-7022	322,473	WC-7585	314	WH-3064	192	WH-5645	204	WS-5510	205	XC-3704	36	XC-4547	22	XC-4951	318	YM-2718	48
WA-7024	470	WC-7586	314	WH-3066	192	WH-5646	204	WS-5511	205	XC-3706	30	XC-4550	22,30	XC-4952	322	YM-2748	49
WA-7026	471	WC-7588	314	WH-3067	193	WH-5654	205	WT-5218	252	XC-3708	35	XC-4551	28	XC-4953	322	YM-2754	48
WA-7030	470	WC-7590	314,474	WH-3070	192	WH-5656	205	WT-5220	252	XC-3712							

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YN-8049	281,309	YT-6059	332	ZC-4070	100	ZD-0201	105	ZD-1790	104	ZL-3972	102	ZR-1416	113	ZT-2255	111	ZZ-8710	99
YN-8050	180,331	YT-6060	332	ZC-4071	100	ZD-0202	105	ZD-1800	106	ZL-3974	102	ZR-1418	113	ZT-2260	111	ZZ-8721	99
YN-8052	180,331	YT-6062	332	ZC-4073	100	ZD-0205	105	ZD-1802	106	ZL-3976	102	ZR-1420	113	ZT-2262	116	ZZ-8727	38,99
YN-8054	180,331	YT-6064	332	ZC-4075	100	ZD-0206	105	ZD-1810	106	ZL-3995	102	ZR-1422	113	ZT-2266	116	ZZ-8742	99
YN-8056	180,331	YT-6068	329	ZC-4076	100	ZD-0210	105	ZD-1824	106	ZM-9012	85	ZR-1424	113	ZT-2270	111	ZZ-8750	99
YN-8057	180	YT-6070	329	ZC-4077	100	ZD-0211	105	ZD-1826	106	ZM-9015	85	ZR-1427	113	ZT-2275	111	ZZ-8753	99
YN-8058	180,331	YT-6078	330	ZC-4081	100	ZD-0212	105	ZD-1850	106	ZM-9050	404	ZR-1430	113	ZT-2277	116	ZZ-8755	99
YN-8074	281,309	YT-6080	332	ZC-4093	100	ZD-0215	105	ZD-1855	106	ZM-9051	404	ZR-1433	113	ZT-2278	111	ZZ-8760	99
YN-8075	316	YT-6081	332	ZC-4094	100	ZD-0220	105	ZD-1856	106	ZM-9052	404	ZR-1436	113	ZT-2280	111	ZZ-8765	99
YN-8200	311	YT-6082	330	ZC-4502	100	ZD-0225	105	ZD-1857	106	ZM-9056	404	ZR-1439	113	ZT-2283	112	ZZ-8770	99
YN-8201	311	YT-6083	330	ZC-4510	100	ZD-0230	105	ZD-1880	107	ZM-9057	404	ZR-1440	113	ZT-2284	112	ZZ-8772	99
YN-8202	311	YT-6086	332	ZC-4511	100	ZD-0232	105	ZD-1882	107	ZM-9058	404	ZR-1450	113	ZT-2285	111	ZZ-8800	103
YN-8203	311	YT-6087	332	ZC-4516	100	ZD-0234	105	ZD-1886	107	ZM-9059	404	ZR-1475	113	ZT-2286	111	ZZ-8900	98
YN-8204	311	YT-6090	310,330	ZC-4518	100	ZD-0240	105	ZD-1900	109	ZM-9155	406	ZR-1480	113	ZT-2287	111	ZZ-8950	287
YN-8205	311	YT-6099	330	ZC-4520	100	ZD-0242	105	ZD-1901	109	ZM-9166	406	ZS-5000	101	ZT-2289	111	ZZ-8952	287
YN-8206	311	YT-9000	328	ZC-4543	100	ZD-0244	105	ZD-1902	33,109	ZM-9168	406	ZS-5001	101	ZT-2290	111	ZZ-8953	287
YN-8207	311	YT-9002	328	ZC-4800	101	ZD-0245	105	ZD-1904	109	ZM-9174	405	ZS-5002	101	ZT-2291	111	ZZ-8970	32
YN-8208	311	YT-9004	328	ZC-4802	101	ZD-0247	105	ZD-1906	109	ZM-9176	405	ZS-5004	101	ZT-2292	111	ZZ-8978	32
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YN-8212	311	YT-9008	329	ZC-4808	101	ZD-0249	105	ZD-1928	109	ZM-9200	406	ZS-5008	101	ZT-2294	111		
YN-8221	311	YT-9010	329	ZC-4810	101	ZD-0250	105	ZD-1934	109	ZM-9202	406	ZS-5010	101	ZT-2297	116		
YN-8222	311	YT-9012	329	ZC-4811	101	ZD-0252	105	ZD-1940	109	ZM-9300	407	ZS-5011	101	ZT-2298	111		
YN-8231	311	YT-9016	328	ZC-4821	101	ZD-0255	105	ZD-1941	109	ZM-9301	407	ZS-5014	101	ZT-2299	111		
YN-8232	311	YT-9018	328	ZC-4823	101	ZD-0256	105	ZD-1945	108	ZM-9904	112	ZS-5020	101	ZT-2300	111		
YN-8272	311	YT-9036	327	ZC-4826	101	ZD-0260	104	ZD-1946	108	ZP-9100	116	ZS-5027	101	ZT-2320	111		
YN-8274	311	YT-9037	303	ZC-4827	101	ZD-0270	105	ZD-1947	108	ZP-9102	116	ZS-5030	101	ZT-2322	111		
YN-8275	311	YT-9038	327	ZC-4828	101	ZD-0272	30	ZD-1948	108	ZP-9104	116	ZS-5032	101	ZT-2324	111		
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Ph: (08) 8448 1151  
85-91 Port Rd,  
Queenstown, 5015

**REYNELLA**  
Ph: (08) 8387 3847  
141 Sherriffs Rd, 5161

**TAS:**  
**HOBART**  
Ph: (03) 6272 9955  
187-205 Main Rd,  
Moonah, 7009

**KINGSTON**  
Ph: (03) 6240 1525  
17 Westside Cir, 7050

**LAUNCESTON**  
Ph: (03) 6334 3833  
167 Brisbane St, 7250

**VIC:**  
**ALTONA**  
Ph: (03) 9399 1027  
14-16 Lobelia Drive,  
Altona North, 3018

**BRIGHTON**  
Ph: (03) 9530 5800  
613 Nepean Hwy, 3187

**CHELTENHAM**  
Ph: (03) 9585 5011  
315 Warrigal Rd, 3192

**COBURG**  
Ph: (03) 9384 1811  
266 Sydney Rd, 3058

**CRANBOURNE**  
Ph: (03) 5858 1724  
Shop 7B, Cranbourne Home,  
Cnr South Gippsland Hwy  
& Thompson Rd, 3911

**FERNTREE GULLY**  
Ph: (03) 9758 5500  
815 Burwood Hwy, 3156

**FRANKSTON**  
Ph: (03) 9781 4100  
80 Dandenong Rd West,  
3199

## GEELONG

Ph: (03) 5221 5800  
48 Mercer St, 3220

**HALLAM**  
Ph: (03) 9796 4577  
1/261 Princes Hwy, 3803

**KEW EAST**  
Ph: (03) 9859 6188  
782 High St, 3102

**MELBOURNE CITY**  
Ph: (03) 9329 3961  
110 Franklin St, 3000

**MELTON**  
Ph: (03) 8716 1433  
175 High St, 3337

**MORNINGTON**  
Ph: (03) 5976 1311  
5/161 Mornington-Tyabb  
Rd, 3931

**RINGWOOD**  
Ph: (03) 9870 9053  
94 Maroondah Hwy, 3134

**ROXBURGH PARK**  
Ph: (03) 8339 2042  
1/195 Somerton Rd,  
Roxburgh Plaza, 3064

**SHEPPARTON**  
Ph: (03) 5822 4037  
4/575-585 Wyndham St,  
3630

**SPRINGVALE**  
Ph: (03) 9547 1022  
Cnr Springvale &  
Dandenong Rds,  
Mulgrave, 3170

**SUNSHINE**  
Ph: (03) 9310 8066  
204 McIntyre Rd, 3020

**THOMASTOWN**  
Ph: (03) 9465 3333  
225B Settlement Rd, 3074

**WERIBEE**  
Ph: (03) 9741 8951  
Cnr Synnot & Wedge  
St, 3030

**WA:**  
**BELMONT**  
Ph: (08) 9477 3527  
53 Belmont Ave, 6104

**BUNBURY**  
Ph: (08) 9721 2868  
175-181 Blair St, 6230

**CLARKSON**  
Ph: (08) 6202 0131  
12A/61 Key Largo Rd, 6230

**JOONDALUP**  
Ph: (08) 9301 0916  
1/4 Packard St, 6027

**MADDINGTON**  
Ph: (08) 9493 4300  
1A/1808 Albany Hwy,  
Kenwick, 6107

**MALAGA**  
Ph: (08) 9248 3613  
1/1890 Beach Rd, 6090

**MANDURAH**  
Ph: (08) 9586 3827  
1/78 Pinjarra Rd, 6210

**MIDLAND**  
Ph: (08) 9250 8200  
1/203 Gt Eastern Hwy, 6056

**O'CONNOR**  
Ph: (08) 9337 2136  
4/5 Stockdale Rd, 6163

**OSBORNE PARK**  
Ph: (08) 9444 9250  
83-87 Frobisher Rd, 6017  
(Cnr Frobisher &  
Collingwood St)

**PERTH**  
Ph: (08) 9328 8252  
326 Newcastle St,  
Northbridge, 6003

**ROCKINGHAM**  
Ph: (08) 9592 8000  
Cnr Read St &  
Patterson Rd, 6168